



FRIDAY, DECEMBER 19, 1879.

Contributions.

The Wear of Swing-Motion Trucks.

TO THE EDITOR OF THE RAILROAD GAZETTE:

In the *Gazette* of Feb. 28, 1879, I had occasion to refer to swing-motion trucks for freight cars. I again refer to the hangers and cross-bars (both top and bottom), and by illustrations herewith show that some of the forms in use will continue to cause the same trouble of which I complained in the article referred to. Very many freight cars have been

through, holds the cross-bar from turning, and thereby stops the wear of either cross-bar or hanger. The motion is over about fourteen inches of surface. The top castings and hangers complete are given in figs. 7 and 8 on a scale of $1\frac{1}{2}$ in. to one foot. The hangers are made of $1\frac{1}{2}$ in. by $\frac{3}{4}$ in. iron. These can be made stronger if desired. There are no points to wear and become weakened; the only deterioration will be the fatigue of metal.

This article may call out some comments from some one who will discover a weak point; it is for that purpose and with a view of benefit from others on kindred subjects I have made this publication.

JOHN KIRBY.

Illinois "Reasonable Maximum Rates"—How they were Made and the Legal Effect.

Under date of Dec. 9, the Illinois Railroad Commissioners have directed the following letter to be addressed to Mr. A.

earnings of said companies. They also took the testimony of certain railroad business experts and of many well-informed shippers, including dealers in grain, lumber, coal, bar-iron, steel, live stock, and merchandise. From all these sources the Commissioners obtained the information which enabled them to determine upon the equitable passenger and freight rates which they have provided for the different railroads of the state.

2. "What view does your commission take of the effect of your schedules? Do you take the view that they have the effect of a public law, and must be obeyed until the courts decide the rates fixed in them to be unreasonable?"

The rates fixed in the schedules prepared by this commission for the several railroad companies of the state are not to be taken as absolutely reasonable maximum rates of charges for the transportation of passengers and freights over the railroads of said companies.

The Supreme Court of the state, in its opinion in the case of the Chicago & Alton Railroad Company vs. The People (67 Ill. Reps., p. 13), informed the General Assembly that it could not make any fixed rates conclusive of what was reasonable; and, in an effort to avoid this difficulty, the law of 1873, which makes the schedules of passenger and freight



Fig. 2.

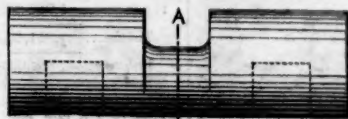


Fig. 1.

SECTION AB OF FIG. 1. SIDE VIEW OF TOP-CROSS-BAR.

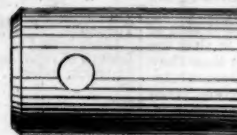


Fig. 3.

PLAN OF END OF
BOTTOM-CROSS-BAR.

Fig. 4.

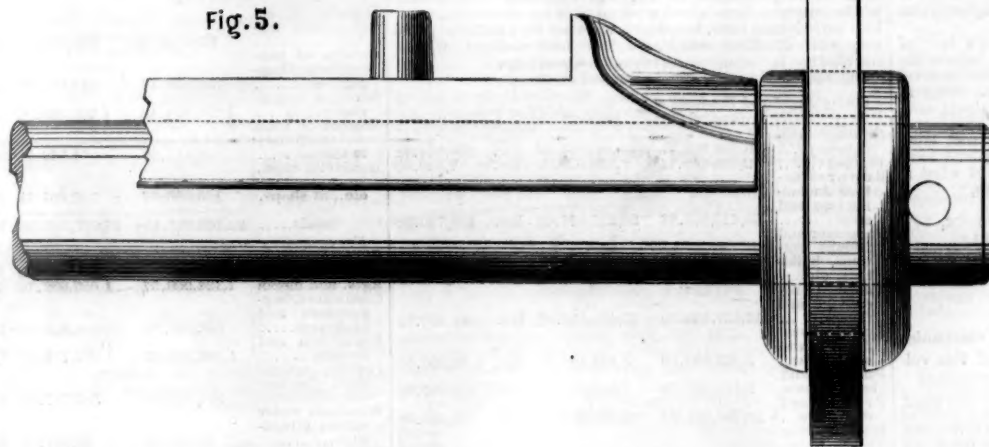
SIDE VIEW OF END OF
BOTTOM-CROSS-BAR.

Fig. 5.



Fig. 6.

constructed, and will be constructed, with swing-motion trucks. A defect in the hangers or cross-bars of such trucks may lead in time to serious results. The economy of an article in use on a railroad should not be measured by the first cost; experience demonstrates this every day, and in many things it is experience alone that can decide.

Figs. 1, 2, 3 and 4 represent the wearing parts of the top and bottom cross-bars of freight-car-trucks which have recently been constructed at the Lake Shore & Michigan Southern Railway Company's shops for repairs. Figs. 1 and 2 represent the top cross-bar, half-size, showing the wear of the hangers at A. Figs. 3 and 4 represent views of the bottom cross-bar, showing wear at C.

I should judge that the trucks were not more than four years old; the holes in the hangers were not as much worn as the cross-bars. Now suppose a railroad company having ten thousand cars, with sixteen bearings to each car, all of them wearing as indicated in the cuts, the aggregate would be very large. I have had my eyes open watching for some plan that would stop this continual wearing and weakening of certain parts. The idea given below is not my own, but a modification of the plan of J. H. F. Wiers, of the Atlantic & Great Western Railroad. If the idea is of value to one railroad company, it is valuable to all; the interchange of cars is so extensive that what affects one railroad company has greater or less influence on other railroad companies. Therefore my doctrine is, "Let your light shine before men."

Illustration No. 5 shows, half size, a side view of one end of the casting on which the spring plank rests, also the cross-bar and end view of the casting in the bottom end of the hanger. Through this the end of the cross-bar passes and rests on the bottom of the hole. Fig. 6 shows an end view of the bar and casting. Figs. 7 and 8 show the whole appliance complete on a smaller scale.

The simplicity of this arrangement is apparent; the cross-bar is made by using $1\frac{1}{2}$ in. round iron cut to length. Take one heat on it, pass it under a steam hammer, to make the sides flat, drill a half-inch hole at each end, and it is done. This makes a bar $1\frac{1}{2}$ in. by $1\frac{1}{2}$ in., the oblong form of this bar going through a casting at each end, having an oblong hole through it to just allow it to pass

Sample, of Paxton, Ill., in reply to inquiries made by him: DEAR SIR: You ask—1. "On what basis did the Railroad and Warehouse Commission fix the rate of passenger fare for the Illinois Central Railroad Company at three cents per mile?"

The Commissioners, in the preparation of schedules of

rates determined upon by the commission *prima facie* evidence of the reasonableness of such rates, was enacted.

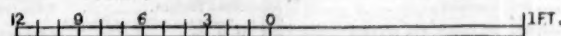
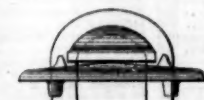
In the case of the Chicago, Burlington & Quincy Railroad Company vs. The People (77 Ill. Reps., p. 443), the Supreme Court decided that it was not enough to set up a suit for extortion, brought under the act of 1873, that the amount



Fig. 7.



Fig. 8.



reasonable maximum rates of charges for the transportation of passengers and freights by each of the railroad corporations doing business in Illinois, examined the published tariffs of the railroad companies of this and other states with a view of determining in what particulars they agreed and differed. The Commissioners also considered the amount of capital invested in the several railroads of the state and in the equipments thereof; the amount of business done, the companies owning railroads in the state, and the average proportion of the operating expenses of the gross

charged exceeded a reasonable rate of toll and compensation and was an extortionate rate. "Looking merely at the first section of the statute," says the Court, "the declaration would seem to describe the statutory offense. That section, by itself, makes the offense to consist in taking more than a reasonable rate of toll or compensation, without any reference to any standard of what is fair and reasonable." If the Court holds this were a fact, there would be no certainty of a railroad company being able to comply with the law, since a company, with the purpose of complying

with the law, might fix its rates at what it believed to be reasonable, and yet be subject to the penalties prescribed by the statute. This was not intended by the Legislature, and that body has prescribed a rule by which the reasonableness of rates shall be ascertained. This is done by requiring the commission to provide a schedule of reasonable maximum rates for each of the railroads of the state, thus supplying a uniform rule for the guidance of the railroad companies. These schedules make a standard of reasonable maximum rates, and a disregard of the rates of the schedules is a necessary element of the offense of extortion. A schedule prepared by this commission for a railroad company is therefore something more than evidence; it is a fact upon which an action for extortion must rest. But the taking by a railroad company of higher rates than those fixed in the schedule prepared for it, would not subject the company to the penalties of the statute upon the making of proof by the company that the higher rates taken were fair and reasonable.

In the case of *Ruggles vs. The People* (Monthly Jurist, April, 1879, p. 759), the Supreme Court delivered an opinion which seemed to be a departure from its dictum in the case of the *Chicago & Alton Railroad Company vs. The People*, above referred to, by which dictum that Court informed the General Assembly that it could not make any railroad rates conclusive of what were reasonable rates; but, in the opinion of the Court denying the prayer of the petition for a rehearing of the *Ruggles* case, there is a return to the doctrine that the right to fix rates, given to a railroad company by its charter, is a right which cannot be impaired by any legislation of the state, but that a fair construction of the contract by which this right was conferred is that the right to fix rates is restricted by implied condition that they must be reasonable, and that consequently the General Assembly may pass laws to prevent railroad companies from charging more than reasonable rates. The implication is, that, even if the General Assembly should establish passenger and freight rates for the railroad companies of the state, and declare them to be reasonable maximum rates, they would be, nevertheless, only *prima facie* reasonable rates.

And this is, in fact, all the schedules of this commission are. They are to be taken in all the courts as *prima facie* evidence that the rates therein fixed are reasonable maximum rates; and, consequently, a railroad company in Illinois may charge higher rates than those fixed by this commission, provided the company is willing to risk its ability to prove that the rates it does charge are reasonable. If a railroad company charges more than the Commissioners' rates, and its patrons are willing to pay the higher rates, there is no law to prevent them from doing so; and, if a railroad company insists on charging more than the Commissioners' rates, and any of its patrons refuse to pay them, and complain of extortion to this board, the company must be, in the fairness of the law, afforded an opportunity of proving to the satisfaction of a jury that the higher rates thus charged are reasonable.

But the question of the constitutionality of the law of 1873, as well as your second question, are now before the Supreme Court of the state, and have been for several years. No doubt the Court will not much longer delay in deciding the cases in which these questions are raised; and, when it has done so, if its decision is in favor of the law—many difficulties that now beset this commission will have been removed out of its way, and a very long step will have been taken in the direction of a wise solution of what is known as the railroad problem. Very truly yours,

W. M. SMITH,
GEORGE M. BOGUE,
JOHN H. OBERLY,
Railroad and Warehouse Commissioners.

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New York Central & Hudson River.

The report is to the State Engineer and Surveyor of New York, for the year ending Sept. 30 1879. The property for which operations are reported was as follows:

| Characteristics of Road: | 1879. | 1878. |
|---------------------------------------|----------|----------|
| Lines owned: | | |
| Length of road, miles..... | 740.17 | 740.17 |
| 2d track, miles..... | 465.30 | 465.30 |
| 3d " "..... | 257.82 | 255.12 |
| 4th " "..... | 225.27 | 225.27 |
| Turnouts..... | 467.89 | 444.09 |
| Lines leased: | | |
| Length of road, miles..... | 290.03 | 290.03 |
| 2d track, miles..... | 49.96 | 49.96 |
| 3d " "..... | 3.85 | 3.85 |
| 4th " "..... | 3.85 | 3.85 |
| Turnouts..... | 37.35 | 37.35 |
| Total miles of track..... | 2,511.49 | 2,484.99 |
| Weight of rail per yard, lbs..... | 65 | 65 |
| No. of engine houses and shops..... | 61 | 61 |
| " engines..... | 594 | 587 |
| " dummies..... | 8 | 8 |
| " first-class passenger cars..... | 364 | 381 |
| " second-class and emigrant cars..... | 95 | 89 |
| " baggage, mail and express cars..... | 167 | 213 |
| " freight cars..... | 16,486 | 15,964 |

The changes in road are an increase of 2.7 miles of third track and 28.8 miles of sidings, or a total addition of 26.5 miles of track owned. The total length of road worked has remained now for several years 1,000.2 miles.

The changes in equipment are an increase of 7 locomotives, a decrease of 17 first-class passenger cars, an increase of 6 second-class and emigrant cars, a decrease of 46 baggage, mail and express cars, and an increase of 522 freight cars. A large number of baggage cars and freight cars whose numbers have always been borne on the books, coming with leased lines, but which were not in existence probably when the lines were leased, have been charged off, and the charges for equipment reduced accordingly.

The cost of the property is reported as follows:

| Cost of Road and Equipment: | 1878-79. | 1877-78. | Inc. or Dec. |
|---|------------------|-----------------|-------------------|
| Grading and masonry..... | \$19,599,938.11 | \$19,543,814.40 | Inc. \$56,124.71 |
| Bridges..... | 2,535,455.74 | 2,528,026.21 | Inc. 7,429.53 |
| Superstructure, including iron and steel..... | 20,415,675.68 | 20,216,925.68 | Inc. 198,750.00 |
| Passenger and freight stations, buildings, etc..... | 12,746,512.37 | 12,196,709.89 | Inc. 549,802.50 |
| Land, land damages and fences..... | 12,537,438.50 | 12,469,817.91 | Inc. 67,620.59 |
| Locomotives, fixtures and snow-plows..... | 5,921,686.70 | 5,838,486.79 | Inc. 83,200.00 |
| Passenger and baggage cars..... | 1,514,292.70 | 1,628,292.79 | Dec. 114,000.00 |
| Freight and other cars..... | 10,294,021.93 | 10,233,626.93 | Inc. 60,395.00 |
| Engineering and agencies..... | 2,960,473.27 | 2,960,473.27 | |
| Rochester & Lake Ontario R. R..... | 150,000.00 | 150,000.00 | |
| Buffalo & Niagara R. R..... | 658,921.56 | 658,921.56 | |
| Leviathan Railroad..... | 400,000.00 | 400,000.00 | |
| Saratoga R. R..... | 2,000,000.00 | 2,000,000.00 | |
| Hudson River R. R..... | 2,000,000.00 | 2,000,000.00 | |
| Totals..... | \$100,773,416.74 | \$99,894,095.43 | Inc. \$879,321.31 |

Five-eighths of the increase in the construction account is for stations, and chiefly for terminal facilities in New York city.

This property is represented by the following shares and bonds:

| Stocks and Debts: | 1878-79. | 1877-78. |
|---|-----------------|-----------------|
| Capital stock..... | \$89,428,300.00 | \$89,428,300.00 |
| Funded debt..... | 39,801,133.33 | 39,801,233.33 |
| Bonds and mortgages given or assumed by the company upon purchase of real estate..... | 685,174.61 | 632,050.56 |
| Average per annum of interest on funded debt..... | 6 1/2 per cent. | 6 1/2 per cent. |

The only change is an increase of \$53,124.05 in the real estate mortgages.

The work done during the year was as follows:

| Doings of the Year in Transportation: | 1878-79. | 1877-78. | Inc. or Dec. P. c. |
|--|---------------|---------------|---------------------|
| Miles run by passenger trains..... | 4,842,148 | 4,888,592 | D. 46,414 1.0 |
| Miles run by freight trains..... | 19,019,361 | 11,106,497 | I. 7,912,864 8.2 |
| Miles by revenue trains..... | 16,861,500 | 15,988,059 | I. 863,450 5.4 |
| Miles run by switch and work trains..... | 5,070,248 | 4,401,501 | I. 677,747 15.4 |
| Total engine mileage..... | 31,940,757 | 20,396,590 | I. 1,544,197 7.6 |
| Passengers carried..... | 8,130,439 | 8,297,565 | D. 167,126 2.0 |
| Mile traveled by passengers..... | 890,953,258 | 800,302,140 | D. 9,651,118 1.1 |
| Total ton-miles of freight: | | | |
| R. R. Co. V..... | 456,426.21 | 41,600,236 | I. 4,045,979 9.7 |
| Other freight..... | 2,895,827,387 | 2,042,755,189 | I. 853,072,198 12.4 |

Here we have a decrease in passenger traffic, though that of the previous year was the smallest for 11 years, but an increase in freight traffic equal to the total freight traffic on many an important road—half as great as the total of the Wabash in 1878, and two-thirds of the Union Pacific's total. The decrease of 3 per cent. in passenger traffic was accompanied by a decrease of 1 per cent. in the passenger-train mileage; the increase of 12.4 per cent. in the freight traffic by an increase of 8.2 per cent. in the freight-train mileage,

the average load having increased from 187.4 to 194.7 tons. The earnings and expenditures were:

| Earnings: | 1878-79. | 1877-78. | Inc. or Dec. | P. c. |
|------------------------------|-----------------|-----------------|-----------------|-------|
| From passen- gers..... | \$5,953,101.94 | \$6,022,955.65 | D. \$69,853.71 | 1.2 |
| From freight..... | 18,270,250.38 | 19,045,829.71 | D. 775,579.33 | 4.1 |
| From rents..... | 1,209,889.45 | 1,244,358.83 | D. 34,469.38 | 2.8 |
| From mail..... | 494,447.78 | 441,143.43 | I. 53,304.35 | 12.1 |
| From car service..... | 1,023,037.41 | 888,402.46 | I. 134,634.95 | 15.1 |
| From tele- graph..... | 6,720.43 | 6,535.77 | I. 184.66 | 2.8 |
| From inter- est..... | 382,444.23 | 384,092.42 | D. 1,648.19 | 0.4 |
| From use of road..... | 227,427.37 | 229,721.10 | D. 2,293.73 | 1.0 |
| From miscel- laneous..... | 829,264.61 | 647,455.81 | I. 181,808.80 | 28.1 |
| Totals..... | \$28,396,583.60 | \$28,910,555.18 | D. \$513,971.58 | 1.8 |
| Operating ex- penses..... | \$16,123,072.83 | \$16,135,977.33 | D. \$12,904.50 | 0.08 |
| Net earnings..... | 12,273,510.77 | 12,774,577.85 | D. 501,067.08 | 4.0 |
| Interest..... | 2,740,761.14 | 2,796,570.35 | D. 46,815.21 | 1.4 |
| Dividends (8 per cent.)..... | 7,139,528.00 | 7,139,528.00 | | |
| Rent of other roads..... | 1,929,233.67 | 1,939,555.70 | D. 10,322.03 | 0.5 |
| Totals..... | \$27,941,625.64 | \$28,011,637.38 | D. \$70,011.74 | 2.5 |
| Balance..... | \$454,957.96 | \$898,917.80 | D. \$443,959.84 | 49.4 |

The changes in the leading items of expenditures, as also in the aggregate expenses, are thus extremely small—a decrease of 1.2 per cent. in passenger earnings, with a decrease of 3.1 per cent. in passenger traffic, a decrease of 4.1 per cent. in freight earnings, notwithstanding an increase of 12.4 per cent. in freight traffic, and a decrease of 1.8 per cent. in aggregate earnings; while expenses decreased less than one-tenth of 1 per cent. The surplus over fixed charges and the 8 per cent. dividend was equivalent to a dividend of 1 1/2 per cent. this year and about half as great as last year. The working expenses in detail were as follows:

| For maintain- ing road: | 1878-79. | 1877-78. | Inc. or Dec. |
|---|-----------------|-----------------|-----------------|
| Repairs of road-bed (excepting cost of rails).... | \$1,444,833.88 | \$1,355,232.30 | I. \$89,601.58 |
| Cost of rails used in repairs..... | 221,755.27 | 322,405.57 | D. 100,650.30 |
| Repairs of build- ings..... | 267,133.20 | 227,716.49 | I. 39,416.71 |
| Repairs of fences and gates..... | 40,220.13 | 42,994.63 | D. 2,774.50 |
| Taxes, assessed on real estate..... | 871,797.85 | 924,506.26 | D. 52,708.41 |
| Totals..... | \$2,845,740.33 | \$2,872,855.25 | D. \$27,114.92 |
| For repairs of machinery: | | | |
| Repairs of en- gines and ten- ders..... | 879,094.13 | 959,544.97 | D. 80,450.84 |
| Repairs of pas- senger and bag- gage cars..... | 390,098.18 | 487,500.19 | D. 97,402.01 |
| Repairs of freight cars..... | 1,275,016.48 | 1,256,323.94 | I. 18,692.54 |
| Repairs of tools and machinery in shops..... | 99,417.59 | 74,560.28 | I. 24,857.31 |
| Incidental exps., including fuel, etc., at shops..... | 150,090.07 | 150,601.15 | D. 5,511.08 |
| Totals..... | \$2,763,710.45 | \$2,697,530.55 | D. \$66,179.90 |
| For operating road: | | | |
| General superin- tendence..... | 138,861.48 | \$137,024.58 | I. 1,836.90 |
| Agents and clerks..... | 1,124,009.57 | 1,027,032.16 | I. 96,977.41 |
| Conductors, bag- gagemen and brakemen..... | 767,737.89 | 794,956.96 | D. 27,219.07 |
| Enginemen and firemen..... | 1,166,244.67 | 1,097,758.67 | I. 68,486.00 |
| Porters, watch- men, flagmen and switchmen..... | 597,352.83 | 583,557.23 | I. 13,795.60 |
| Wood and water station attend- ance..... | 44,910.43 | 49,927.14 | D. 5,016.71 |
| Labor, loading and unloading freight..... | 1,187,693.58 | 1,110,689.39 | I. 77,004.19 |
| Fuel: Cost and labor preparing oil and waste... | 2,102,900.98 | 1,996,463.51 | I. 106,437.47 |
| Loss and damage on baggage... | 2,060.06 | 748.90 | I. 1,311.16 |
| Loss and damage on freight..... | 45,748.18 | 66,517.82 | D. 20,769.64 |
| Damage for in- juries to per- sons..... | 56,653.70 | 50,516.02 | I. 6,137.68 |
| Damage to prop- erty, including cattle killed on track..... | 8,486.30 | 24,753.10 | D. 16,266.71 |
| Hauling freight cars in New York City..... | 42,707.50 | 48,516.55 | D. 5,809.05 |
| Lighters and cartage..... | 787,658.58 | 772,708.47 | I. 14,950.11 |
| Rents..... | 149,932.99 | 364,865.34 | D. 214,932.35 |
| Freight-car ser- vice..... | 1,763,155.73 | 1,673,719.99 | I. 89,435.74 |
| Office expenses, stationery, etc..... | 61,641.03 | 61,245.99 | D. 395.04 |
| Contingencies..... | 202,269.08 | 190,470.51 | I. 11,798.57 |
| Totals..... | \$10,513,616.05 | \$10,395,591.55 | I. \$118,024.50 |

This company's report always includes the receipts for car mileage in its earnings and the payments for this service in expenses. The general practice is to exhibit only the balance, and debit or credit it as the case may be. The effect of this on the New York Central's accounts this year would be to reduce the working expenses by \$1,023,037.41, and the earnings by an equal amount. As this falls wholly on the freight expenses, it makes a material difference in the expense per ton per mile.

The tons of the different kinds of freight carried were:

| | 1878-79. | P. c. of total. | 1877-78. | P. c. of total. |
|-----------------------------|-----------|-----------------|-----------|-----------------|
| Products of the forest | 429,261 | 4.8 | 415,565 | 5.4 |
| Of animals | 1,041,296 | 11.5 | 1,024,071 | 13.3 |
| Of vegetable food | 3,067,813 | 34.0 | 2,628,190 | 34.1 |
| Other agricultural products | 508,669 | 5.6 | 507,388 | 7.8 |
| Manufactures | 1,078,405 | 12.0 | 812,882 | 10.5 |
| Merchandise | 656,774 | 7.3 | 542,566 | 7.1 |
| Coal | 1,289,727 | 14.3 | 872,436 | 11.4 |
| Other articles | 943,808 | 10.5 | 802,315 | 10.4 |
| Total | 9,015,753 | 100.0 | 7,695,413 | 100.0 |

The passenger rates per mile for different classes were:

| | 1878-79. | 1877-78. |
|----------------------|-------------|-------------|
| First-class through | 1.98 cents. | 2.01 cents. |
| Second-class through | 1.55 " | 1.56 " |
| Third-class through | 1.06 " | 1.10 " |
| Emigrant through | 1.13 " | 1.13 " |
| Way | 1.24 " | 1.18 " |

Deductions from this report, including receipts and expenses per passenger and ton per mile, train loads, etc., will be found on the editorial page, calculated for the past five years.

Burlington, Cedar Rapids & Northern.

This company, successor through foreclosure to the Burlington, Cedar Rapids & Minnesota, works the following lines:

| | Miles. |
|--|--------|
| Main line, Burlington, Ia., to Albert Lea, Minn. | 252 |
| Milwaukee Division, Linn, Ia., to Postville | 94 |
| Pacific Division, Vinton, Ia., to Holland | 48 |
| Muscatine Division, Muscatine, Ia., to Riverside | 31 |
| Iowa City Division, Elmira, Ia., to Iowa City | 10 |
| Total | 435 |

The track from Manly Junction to Northwood, 11 miles, is owned by the Central Iowa Railway, and operated in conjunction with that railway. The track from the state line to Albert Lea, 12½ miles, is owned by the Minneapolis & St. Louis Railway Company, and is leased to this company for a term of 999 years.

The Iowa Division is to be extended south to Riverside, and thence to What Cheer, 57 miles in all, by the Iowa City & Western, now about completed, and to be leased by this company. By the purchase of the Iowa City Division, the former Chicago, Clinton & Western road, the company also holds 17 miles of partly finished track near Clinton. The report is for the year ending June 30, 1879.

The stock and bonds are as follows:

| | |
|--|--------------|
| Stock issued (\$12,972 per mile) | \$5,500,000 |
| First-mortgage 5 per cent. bonds (\$15,339 per mile) | 6,500,000 |
| Minn. & St. Louis 7 per cent. bonds assumed | 150,000 |
| Total | \$12,150,000 |

The total amount of stock authorized is \$10,000,000.

The earnings of the road for the year were as follows:

| | 1878-79. | 1877-78. | Inc. or Dec. | P. c. |
|----------------------|-------------|-------------|--------------|-------|
| Passengers | \$300,531 | \$308,925 | D. | 2.7 |
| Freight | 1,038,525 | 1,264,476 | D. | 22.5 |
| Express, mail, etc. | 48,905 | 41,362 | I. | 18.2 |
| Total | \$1,387,961 | \$1,614,763 | D. | 14.0 |
| Expenses | 950,658 | 1,054,452 | D. | 9.8 |
| Net earnings | \$437,303 | \$560,311 | D. | 21.9 |
| Gross earn. per mile | 3.191 | 3.919 | D. | 18.6 |
| Net earn. per mile | 1.005 | 1.300 | D. | 26.1 |
| Per cent. of exps. | 68.49 | 65.30 | I. | 4.9 |

The loss in earnings was due to the partial failure of the wheat crop along the line. The earnings and expenses were apportioned to the various divisions as follows:

| | Earnings. | Expenses. | Net earn. | per mile. | Exps. |
|----------------|-------------|-----------|-----------|-----------|--------|
| Main line | \$1,027,330 | \$725,592 | \$301,738 | \$4.077 | 70.65 |
| Milwaukee Div. | 137,264 | 117,321 | 19,943 | 1.400 | 85.63 |
| Pacific Div. | 187,323 | 70,372 | 116,951 | 3.903 | 37.63 |
| Muscatine Div. | 28,636 | 29,980 | \$1,344 | 924 | 104.69 |
| Iowa City Div. | 7,408 | 7,423 | \$15 | 741 | 100.20 |
| Total | \$1,387,961 | \$950,658 | \$437,303 | \$3.191 | 68.49 |

* Deficit.

The business of both the Iowa City and Muscatine divisions will, it is expected, be largely increased by the extensions just completed.

The income account, condensed, is as follows:

| | |
|--|-----------|
| Net earnings | \$437,303 |
| Sale of property and miscellaneous | 36,383 |
| Interest and bond account | 27,800 |
| Sale of \$500,000 bonds at 70½ | 350,625 |
| Cash, etc., on hand from previous year | 61,497 |
| Total | \$913,608 |

| | |
|--|-----------|
| Interest paid | \$35,513 |
| Cash and accounts receivable | 105,204 |
| New construction, etc. | 98,932 |
| Purchase of Chicago, Clinton & Western R. R. | 162,798 |
| Unfunded debt | 393,303 |
| Increase in material account | 16,655 |
| Total | 1,112,405 |

Increase of debt

This debt is represented by \$106,236 pay-rolls and accounts; \$88,631 bills payable, and \$3,980 loan account. Against this debt the company has \$301,245 in cash, materials and receivables, 33½ miles of unencumbered road built in 1877, and the Chicago, Clinton & Western road, besides \$6,100 bonds and \$4,500,000 stock unissued.

Of the Iowa City & Western Railway Company, the General Manager's report says: "By authority of the board of directors, I entered into a contract and agreement of lease, which gives us a perpetual control of the company and road for the consideration of a guaranty of 7 per cent. interest upon said bonds (\$456,000), and it is expected the whole line will be delivered to us, ready for operation, about Nov. 1 next. Twenty-four miles of track will be of steel and 33 of iron rails, all weighing 52 lbs. per lineal yard. The road will have easy grades and can be very cheaply operated and maintained. Our company paid to other roads for the year ending June 30, 1879, \$29,491 as freight upon coal for its own uses, and a further sum of \$103,504 was collected upon revenue coal carried over our lines. The entire consumption can be supplied from the coal to be mined near What Cheer, and a large sum thereby saved and earned. The additional annual interest charge because of this 57 miles of new road will be \$31,920, and, including that upon the entire cost of the Chicago, Clinton & Western Railway property (\$162,798), it will be \$43,315."

The President's report says: "The property and franchises of the Chicago, Clinton & Western Railway Company were

TEXAS RAILROADS IN 1879.

| NAME OF RAILROAD. | Miles of road. | Capital paid in. | Debt. | Total receipts. | No. of cars. | No. of engines. |
|--------------------------------|----------------|------------------|-----------------|-----------------|--------------|-----------------|
| Central & Montgomery | 25 | \$140,000.00 | \$30,831.61 | \$5,640.36 | 13 | ..... |
| Corpus Christi, San D. & R. G. | 40 | 87,033.33 | 310,000.00 | 59,818.80 | 53 | ..... |
| Dallas & Wichita | 20 | ..... | ..... | ..... | ..... | ..... |
| Denison & Pacific | 25 | 257,500.00 | 300,000.00 | 34,223.57 | 50 | ..... |
| Denison & Southeastern | 20 | 50,000.00 | 183,902.79 | 40,541.90 | 21 | ..... |
| East Line & Red River | 93 | 167,443.75 | 337,536.99 | 92,291.84 | 65 | ..... |
| Galveston, Brazos & Colorado | 15 | ..... | ..... | ..... | ..... | ..... |
| Galveston, H. & San Antonio | 215 | 4,638,794.40 | 6,103,449.30 | 1,398,361.11 | 621 | ..... |
| Galveston, H. & Henderson | 50 | 1,000,000.00 | 2,792,921.55 | 551,060.73 | 312 | 4 |
| Georgetown | 10 | 20,054.00 | 17,000.00 | 7,027.37 | 13 | 1 |
| Gulf, Colorado & Santa Fe | 63 | 1,250,000.00 | 200,000.00 | 1,390.28 | ..... | ..... |
| Gulf, West. Texas & Pacific | 66 | 1,054,900.00 | ..... | 151,757.87 | 89 | ..... |
| Henderson & Overton | 16 | 90,000.00 | 90,000.00 | 29,571.05 | 21 | 2 |
| Houston, East & West Texas | 61 | 500,000.00 | 190,000.00 | 50,692.23 | 150 | ..... |
| Houston & Texas Central | 510 | 7,725,300.00 | 17,465,458.48 | 3,202,528.88 | 2,271 | 88 |
| International & Great Northern | 519 | 5,500,000.00 | 16,067,721.49 | 1,761,344.12 | 1,061 | 31 |
| Longview & Sabine Valley | 12 | 55,000.00 | 20,831.61 | 5,040.26 | 13 | ..... |
| Rio Grande | 22 | 250,334.00 | 336,499.00 | 117,913.98 | 92 | ..... |
| Sabine Pass & Northwestern | 11 | 40,000.00 | 8,500.00 | ..... | ..... | ..... |
| Texas & New Orleans | 95 | 3,000,000.00 | 1,576,230.06 | 238,281.25 | 263 | 7 |
| Texas & Pacific | 443 | 6,906,000.00 | 20,300,880.83 | 2,200,961.59 | 1,280 | 33 |
| Texas Central | 30 | 54,015.00 | 184,857.57 | ..... | 295 | ..... |
| Texas Transportation Co. | 8 | 23,400.00 | 335,000.00 | 48,038.59 | 204 | ..... |
| Texas Western | 12 | 138,485.00 | 48,028.09 | 12,127.75 | 30 | ..... |
| Waxahachie Tap | 5 | ..... | ..... | ..... | ..... | ..... |
| Missouri, Kansas & Texas | ..... | ..... | ..... | ..... | ..... | ..... |
| Totals | 2,428 | \$32,947,259.48 | \$60,956,025.97 | \$10,056,572.83 | 6,837 | 106 |

The Galveston News, from which we take this table, compiled from the reports made to the State Comptroller of Texas, says: "The table herewith is made from the annual reports of the railroad companies just in. The Texas & Pacific is the best report, coming in every respect fully up to the requirements of the law. Many of the other reports are incomplete and unsatisfactory. These reports are made to the Comptroller. There is no report from the Dallas & Wichita, the Galveston, Brazos & Colorado, the Waxahachie Tap or the Missouri, Kansas & Texas, but they are included in order to give the total miles of railroad in the state. The branches of the Texas & Pacific, and also of the Central and the International, are included in their respective heads and totals. The accidents, by which 106 persons have been injured, are all result of the business, and the injuries, with very few exceptions, are trivial."

* Corpus Christi, San Diego & Rio Grande; Galveston, Brazos & Colorado; Houston, East & West Texas; Longview & Sabine Valley; East Line & Red River; and Texas Western are all narrow-gauge roads. The others are standard gauge."

acquired as a measure of protection for the interests of this company.

"With reference to the suit brought by the trustees of Henry Clews & Co., to compel recognition by the company of certain coupons, it is proper to state that the same has been submitted to the judgment of several eminent lawyers, and, without exception, their opinion is that the claim of the trustee has no basis either in equity or in law."

The following circular accompanies the report:

"In September, 1879, the board of directors approved of an agreement for a perpetual lease of the railroad of this company to the Chicago, Rock Island & Pacific Railroad Company, upon the following terms:

"The Chicago, Rock Island & Pacific Railroad Company to pay or provide for the interest upon the bonds for which this company is liable, either as maker or guarantor; and also to pay a sum equal to 3 per cent. per annum upon the stock of this company for five years, and 5 per cent. per annum upon the stock thereafter in perpetuity. Suitable provisions are made as to the renewal of bonds at maturity, and as to other details. The agreement will be submitted for the approval of the stockholders of this company in due course."

"The suit of J. Nelson Tappan has been dismissed upon demurrer by the United States Circuit Court of Iowa."

Metropolitan Elevated.

The report of this company to the New York State Engineer for the year ending Sept. 30, 1879, covers the first full year of the working of the Sixth avenue line of the road, its line having been open only about four months of the previous year.

The stock and debt reported are as follows:

| | 1879. | 1878. |
|-------|--------------|-------------|
| Stock | \$6,500,000 | \$655,000 |
| Bonds | 5,082,000 | 7,500,000 |
| Total | \$11,582,000 | \$8,155,000 |

The earnings and expenses for the year were as follows:

| | |
|----------------------------|-------------|
| Passengers | \$1,283,160 |
| Miscellaneous | 2,820 |
| Total | \$1,285,980 |
| Expenses (55.17 per cent.) | 709,524 |
| Net earnings | \$576,456 |
| Interest | 220,000 |
| Balance | \$356,456 |

Both this road and the New York Elevated are now leased to the Manhattan Company, with a guarantee of 10 per cent. dividends.

New York Elevated.

The following statements are from the report made by this company to the New York State Engineer for the year ending Sept. 30, 1879.

The stock, etc., were as follows:

| | 1879. | 1878. |
|----------------------------|-------------|-------------|
| Stock paid in | \$6,500,000 | \$3,190,125 |
| Funded debt | ..... | 4,800,000 |
| Cost of road and equipment | 13,410,115 | 8,504,629 |

The number of passengers carried was 29,875,912, against 4,916,322 for the preceding year, but on more than double the length of line.

The earnings for the year were as follows:

| | 1878-79. | 1877-78. | Inc. or Dec. |
|-----------------------|-------------|-----------|----------------|
| Passengers | \$2,233,402 | \$427,417 | I. \$1,805,985 |
| Miscellaneous | 6,087 | 2,571 | I. 3,516 |
| Total | \$2,239,489 | \$429,988 | I. \$1,809,501 |
| Expenses | 1,171,340 | 250,727 | I. 920,613 |
| Net earnings | \$1,068,149 | \$179,261 | I. \$888,888 |
| Per cent. of expenses | 52.30 | 58.32 | D. 6.02 |

Of the expenses \$51,459 were for maintenance of road; \$74,459 for repairs of machinery, and \$1,045,422 for operating road. Payments from net earnings were as follows:

| | |
|---------------|-------------|
| Net earnings | \$1,068,149 |
| Interest | \$477,715 |
| Dividends | 533,925 |
| New York city | 27,810 |
| Surplus | \$28,600 |

The great increase in earnings came from the East Side or Third Avenue Line, which was worked for the whole of the year, but for only a few months of the preceding year.

Knoxville & Ohio.

This company owns a line from Knoxville, Tenn. to Careyville, with a short branch to Coal Creek, making 39.19

miles in all. The following statements were made at the recent annual meeting for the year ending June 30, 1879.

The car equipment consists of one passenger and one second-class car; 4 box and 52 coal cars; 11 service cars.

The freight traffic for the year was as follows:

| | 1878-79. | 1877-78. | Increase. | P. c. |
|--------------------|----------|----------|-----------|-------|
| Tons coal | 112,443 | 90,964 | 21,479 | 23.8 |
| Tons other freight | 6,080 | 4,475 | 1,605 | 3.2 |
| Total | 119,129 | 97,439 | 21,690 | 22.3 |

The earnings and expenses were as follows:

| | 1878-79. | 1877-78. | Increase. | P. c. |
|----------------------|-------------|-------------|------------|-------|
| Gross earnings | \$97,827.51 | \$92,160.18 | \$5,667.33 | 6.1 |
| Expenses | 61,493.05 | 55,897.26 | 5,595.79 | 10.0 |
| Net earnings | \$36,334.46 | \$36,262.92 | \$71.54 | 0.2 |
| Gross earn. per mile | 2,496.23 | 2,351.62 | 144.61 | 6.1 |
| Net | 927.11 | 925.31 | 1.80 | 0.2 |
| Per cent. of exps. | 62.88 | 60.68 | 2.20 | 3.6 |

The increase in expenses was in maintenance of way and repairs of cars. The net earnings were almost exactly the same for the two years. The interest on bonded debt was \$36,225, leaving a surplus of \$108.56 for the year.

During the year 350 tons steel rails and 12½ tons rolled iron rails were laid, and 14,121 new ties used; 3.45 miles of track were ballasted, making 10.37 miles now in ballast. Four new coal cars were built and one rebuilt. The road is in better condition than ever before.

Green Bay & Minnesota.

This company owns a line from Green Bay, Wis., to Marshland, 210 miles, and a branch line from Onalaska to La Crosse, 6 miles. It leases the use of the Chicago & Northwestern tracks from Marshland to Winona, Minn., 5 miles, and from Marshland to Onalaska, 24 miles, making 216 miles owned and 245 miles worked. This road is in the hands of a receiver pending suits for foreclosure of mortgage, and the following brief statements are from the report made by him to the Wisconsin Railroad Commissioner for the year ending Sept. 30, 1879.

The stock and debt reported are as follows:

| | |
|----------------------------------|--------------|
| Stock issued (\$37,018 per mile) | \$7,995,900 |
| Bonds (\$18,425 per mile) | 3,979,860 |
| Unfunded debt | 1,710,616 |
| Total (\$63,363 per mile) | \$13,686,376 |

The net cash realized from the sale of bonds was \$2,967,480 in amount.

The earnings for the year were as follows:

| | 1878-79. | 1877-78. | Inc. or Dec. | P. c. |
|----------------------|-----------|-----------|--------------|--------|
| Gross earnings | \$348,000 | \$384,701 | D. | 9.4 |
| Expenses | 202,756 | 277,909 | D. | 75.153 |
| Net earnings | \$145,244 | \$106,792 | I. | 39.142 |
| Gross earn. per mile | 1,423 | 1,570 | D. | 148 |
| Net | 596 | 436 | I. | 160 |
| Per cent. of exps. | 58.15 | 72.34 | D. | 14.09 |

Payments from net earnings were \$1,222 for taxes and \$20,267 for rentals, \$21,489 in all, leaving a surplus of \$124,445, or about 2.2 per cent. on the total debt. The saving in expenses was large, resulting in an increase in the net earnings, which are still very light.

The World's Time.

"The World's Time" is the title of a large card or table issued by the Baltimore & Ohio Company, giving the equivalent local time every ten minutes during the day, at a number of prominent cities in the Eastern and Western hemispheres. It is in convenient form for reference when hung up in an office, and has sufficient interest and value to insure its preservation when an advertising card of any of the usual forms would be thrown away. Indeed, the accompanying reference to the Baltimore & Ohio line is of an exceedingly modest and unobtrusive nature, though so placed that it cannot fail to be seen.

The First Locomotive in Illinois.

The first locomotive engine operated in Illinois was the "Experiment," built by Crossman & Grover, of Richman. It commenced running in the autumn of 1838, on the Northern Cross Railroad, which was finished from Naples to Jacksonville. This was the earliest laid railroad track in Illinois, now forming a part of the Wabash. It was what was called the flat rail, being a flat bar of iron screwed on to the top of a square bar or rail of wood. The weight of the locomotive was eight and one-half tons. Its speed on the trial trip was two miles in 1 minute and 58 seconds.—Quincy Whig.

The statement as to speed looks somewhat doubtful.



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S. WRIGHT DUNNING AND M. N. FORNEY.

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EDITORIAL ANNOUNCEMENTS.

Passes.—All persons connected with this paper are forbidden to ask for passes under any circumstances, and we will be thankful to have any act of the kind reported to this office.

Addresses.—Business letters should be addressed and drafts made payable to THE RAILROAD GAZETTE. Communications for the attention of the Editors should be addressed EDITOR RAILROAD GAZETTE.

Advertisements.—We wish it distinctly understood that we will entertain no proposition to publish anything in this journal for pay, EXCEPT IN THE ADVERTISING COLUMNS. We give in our editorial columns OUR OWN OPINIONS, and those only, and in our news columns present only such matter as we consider interesting and important to our readers. Those who wish to recommend their inventions, machinery, supplies, financial schemes, etc., to our readers can do so fully in our advertising columns, but it is useless to ask us to recommend them editorially, either for money or in consideration of advertising patronage.

Contributions.—Subscribers and others will materially assist us in making our news accurate and complete if they will send us early information of events which take place under their observation, such as changes in railroad officers, organizations and changes of companies, the letting, progress and completion of contracts for new works or important improvements of old ones, experiments in the construction of roads and machinery and in their management, particulars as to the business of railroads, and suggestions as to its improvement. Discussions of subjects pertaining to ALL DEPARTMENTS of railroad business by men practically acquainted with them are especially desired. Officers will oblige us by forwarding early copies of notices of meetings, elections, appointments, and especially annual reports, some notice of all of which will be published.

THE NEW YORK CENTRAL REPORT.

This important document appears this year earlier than usual, and in view of the condition of the times and the recent large sale of the stock of this company and the general active speculation in railroad securities, will attract, doubtless, more than the usual attention even. This and the other trunk-line roads give a pretty good clue to the general activity in transportation business of the country, and of the profitability of the mileage from the Hudson River to the Mississippi, north of the Ohio River.

The result of the year (ending with September last) does not indicate any great improvement in business during that year. Briefly summarizing, we may say that, in comparison with the previous year, there was a decrease of 3 per cent. in passenger traffic, an increase of 12½ per cent. in freight traffic, a decrease of 1¼ per cent. in gross earnings, substantially no change in the working expenses, and a decrease of half a million dollars, or 4 per cent., in net earnings. In making this comparison, however, we must remember that the gross earnings and expenses in 1878 were the largest since 1875, and the net earnings the largest since 1874 and with two exceptions the largest in the history of company; that is, we are comparing with an exceptionally favorable year. This will be shown clearly by the following statement:

Gross and Net Earnings and Working Expenses, New York Central & Hudson River Railroad, for Eleven Years.

| Year. | Gross earnings. | Working expenses. | Net earnings. |
|--------------|-----------------|-------------------|---------------|
| 1868-69..... | \$24,847,065 | \$14,503,156 | \$10,343,909 |
| 1869-70..... | 24,910,590 | 15,733,481 | 9,177,108 |
| 1870-71..... | 20,670,898 | 15,337,239 | 5,333,659 |
| 1871-72..... | 28,437,201 | 18,165,820 | 10,271,381 |
| 1872-73..... | 32,496,021 | 19,570,047 | 12,925,974 |
| 1873-74..... | 31,650,387 | 18,388,298 | 13,262,089 |
| 1874-75..... | 29,027,218 | 17,262,108 | 11,765,110 |
| 1875-76..... | 28,046,588 | 16,124,172 | 11,922,416 |
| 1876-77..... | 29,579,086 | 14,946,102 | 14,632,984 |
| 1877-78..... | 28,910,555 | 16,135,977 | 12,774,578 |
| 1878-79..... | 28,396,584 | 16,123,073 | 12,273,511 |

Thus, with the exception of 1878, the New York Central's profits were the largest since 1874, and there

are but three years in the history of the property that they have been exceeded.

Still, the returns of this year cannot be looked upon as indicating unmistakably national prosperity. National activity in production they do indicate, for the freight traffic was one-eighth greater than in the year preceding, when it was much larger than ever before; but freight traffic has not ceased to increase on the trunk lines and on this road especially since 1873, and it has not been due wholly to increased production, but partly to a diversion of traffic from the water route. A better indication of prosperity—of increased purchasing power in the community—we believe to be found in the passenger traffic, and perhaps the most notable thing in this report of the New York Central is the fact that its passenger traffic is the *smallest* in the history of the road. Here again we support our statement by the figures:

Passenger and Freight Traffic of the New York Central & Hudson River Railroad for Eleven Years.

| Year. | Passenger mileage. | Tonnage mileage. |
|--------------|--------------------|------------------|
| 1868-69..... | 841,137,567 | 906,541,644 |
| 1869-70..... | 340,808,869 | 788,690,304 |
| 1870-71..... | 313,234,356 | 905,854,651 |
| 1871-72..... | 342,339,006 | 1,041,984,687 |
| 1872-73..... | 364,356,580 | 1,277,489,897 |
| 1873-74..... | 350,781,541 | 1,301,509,707 |
| 1874-75..... | 338,034,300 | 1,404,008,029 |
| 1875-76..... | 353,136,145 | 1,674,447,055 |
| 1876-77..... | 316,847,325 | 1,619,948,685 |
| 1877-78..... | 300,302,140 | 2,042,755,132 |
| 1878-79..... | 290,953,253 | 2,295,827,387 |

What a contrast between the two branches of business! The passenger traffic has fallen off 20 per cent. since 1873, while within the same period the freight traffic has increased 80 per cent. But there has been no diversion of passenger traffic worth speaking of—the decline (we will not say in 1878, but for the whole period) has been general. This indicates that, however great the recovery of business may have been last year, it had not gone so far as to enable the community generally to indulge more in the luxury of travel. As in the case of the Erie, the growth of freight traffic seems largely if not wholly due to the decrease in rates, which diverted traffic from the water routes. The increase in freight traffic (tonnage mileage) was considerably greater in amount on the Erie (344,000,000 against 253,000,000 ton miles), and of course a still greater percentage (28 against 12½). This is largely due to the larger coal traffic of the Erie, to which two-thirds of its increase was due. The New York Central's coal traffic also increased greatly (nearly 50 per cent. in tons handled), but only one-seventh of its freight was coal even this year, while this is about one-third of the Erie's freight.

The increase in total traffic on the Central, counting a passenger mile equivalent to two ton miles (it earns 2½ times as much and costs twice as much) was a trifle more than 5 per cent., and was carried with an increase of 5.4 per cent. in train mileage. There was a reduction in the average train-loads of passengers, but an increase in the average freight-train loads, which were nearly 195 tons, and the largest in the history of the road. It was largely due to this, doubtless, that the working expenses were not increased by the large increase of freight traffic. Indeed, it was hardly to be expected that the expenses would be so low; but the higher prices for materials have had little effect on the earnings of the year ending with September, during a large part of which, indeed, both iron and coal were as low as ever was known. It is during the current year that the higher prices of these supplies will have full effect. The maintenance expenses are lower than in 1878, but then they were higher in 1878 than for some years before. Evidently the rail renewals were not as great as the average requirements will be; the expenditures for rails were nearly a third less than in 1878, but about the same as in 1877.

Like other roads with a heavy trunk-line traffic, this line has profited greatly by the heavy traffic at good rates that have prevailed since August last. Only one of these months went into the last fiscal year, however; that year was made up of two months (October and November) of very heavy traffic at good rates, a tolerable traffic in December at irregular but still remunerative rates; a very bad January, in which the road was blockaded so as to have a very light traffic, while expenses were materially increased and rates were going to pieces, and then the eight months from February to August inclusive, in which traffic was enormous and through rates wretchedly low—a good part of the time below the cost of transportation. So far this year, the course of business has been exactly parallel—heavy traffic at good rates until very recently, when traffic, as usual immediately after the close of navigation, has fallen off somewhat. If the parallel were to continue, the company would do well to make as much profit as last year. It would probably carry more freight, but expenses are sure to be greater. The chief ground for hope of a better result this year (and it is not so much the New York Central as the other

trunk lines that have occasion to hope for an improvement) is the maintenance of the east-bound rates made by the Joint Executive Committee—the maintenance of regular rates on east-bound freight. There has never before been so good a prospect of doing this since winter rates were first demoralized, in 1874-75; but as they never have been maintained through the winter since that time, there is naturally some anxiety on the subject. It is not to be expected that the present rate will be maintained till navigation opens, or that it may not be necessary to carry at a very low rate after that opening. But if there is no railroad war the railroads may at least get what the transportation is worth, and not less than 20 cents per 100 lbs. from Chicago to New York, while last year they carried immense quantities at 15, 12½, and even 10 cents.

But to resume the consideration of the report. To make possible a study of its business for a series of years we have made the following deductions from the reports of the past five years (ending with September):

| | 1879. | 1878. | 1877. | 1876. | 1875. |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| Per cent. of expenses | 56.77 | 55.51 | 56.23 | 57.50 | 56.49 |
| Per mile of road: | | | | | |
| Earnings..... | \$28,396 | \$28,910 | \$26,578 | \$28,046 | \$29,027 |
| Expenses..... | 16,123 | 16,136 | 14,946 | 16,124 | 17,262 |
| Profit..... | 12,273 | 12,774 | 11,632 | 11,922 | 11,765 |
| Per mile of track: | | | | | |
| Earnings..... | 11,307 | 11,634 | 10,347 | 11,110 | 12,514 |
| Expenses..... | 6,403 | 6,448 | 6,046 | 6,214 | 7,250 |
| Profit..... | 4,904 | 5,186 | 4,301 | 4,896 | 5,264 |
| Per train mile: | | | | | |
| Earnings..... | \$1.81 | \$1.81 | \$1.85 | \$2.00 | ..... |
| Expenses..... | 0.96 | 1.01 | 1.04 | 1.15 | ..... |
| Profit..... | 0.79 | 0.80 | 0.81 | 0.85 | ..... |
| Per passenger train mile: | | | | | |
| Earnings..... | 1.23 | 1.23 | 1.43 | 1.42 | 1.50 |
| Expenses..... | 0.72 | 0.78 | 0.70 | 0.88 | 1.01 |
| Profit..... | 0.51 | 0.45 | 0.73 | 0.54 | 0.49 |
| Per freight train mile: | | | | | |
| Earnings..... | 1.52 | 1.71 | 1.68 | 1.80 | 2.11 |
| Expenses..... | 1.05 | 1.11 | 1.15 | 1.26 | 1.40 |
| Profit..... | 0.47 | 0.60 | 0.53 | 0.54 | 0.69 |
| Earnings (cents)..... | 2.05 | 2.01 | 2.07 | 1.91 | 2.14 |
| Expenses "..... | 1.10 | 1.28 | 1.14 | 1.00 | 1.30 |
| Profit "..... | 0.86 | 0.73 | 0.93 | 0.89 | 0.78 |
| Per ton per mile: | | | | | |
| Earnings (cents)..... | 0.796 | 0.914 | 1.01 | 1.05 | 1.27 |
| Expenses..... | 0.541 | 0.590 | 0.70 | 0.71 | 0.90 |
| Profit..... | 0.255 | 0.324 | 0.31 | 0.34 | 0.37 |
| Average train-load: | | | | | |
| No. passengers..... | 60.1 | 61.4 | 60.0 | 74.5 | 74.3 |
| Tons freight..... | 194.7 | 184.1 | 165.7 | 180.4 | 166.1 |
| Traffic per mile of road: | | | | | |
| Passenger trains..... | 4,842 | 4,988 | 4,594 | 4,743 | 4,594 |
| Freight trains..... | 12,019 | 11,100 | 9,774 | 9,278 | 8,458 |
| Passenger miles..... | 291,038 | 290,302 | 216,842 | 313,196 | 338,034 |
| Ton-miles..... | 2,295,827 | 2,042,755 | 1,619,948 | 1,674,444 | 1,404,008 |
| Traffic per mile of track: | | | | | |
| Passenger trains..... | 1,928 | 1,987 | 1,859 | 1,950 | 1,915 |
| Freight trains..... | 4,770 | 4,471 | 3,929 | 3,814 | 3,550 |
| Passenger-miles..... | 115,880 | 120,846 | 128,080 | 145,141 | 142,230 |
| Ton-miles..... | 932,309 | 898,774 | 655,300 | 698,223 | 599,177 |

* Including all earnings, a considerable amount of which is not made by trains.
† Passengers alone, not including mail and express earnings.

The road has remained substantially the same during this period, the only increases being in the additional tracks and sidings, so that the earnings, expenses and profits per mile of road have varied just as the aggregate of these items have. The earnings, expenses, etc., per train mile (revenue train) are valuable chiefly for comparison with roads which do not separate passenger and freight expenses. They are very inaccurate statements, because they include a considerable amount not earned by trains, as rents and car-hire. The passenger-train earnings are seen to have decreased almost continuously, and to be 22½ per cent. less in 1879 than in 1875, though passenger rates have decreased very little. The passenger-train expenses have also been reduced, though they reached their minimum in 1877. The fluctuation in passenger-train profits has been greater. They were largest in 1877 and smallest in 1878.

Freight-train have earnings decreased rapidly and continuously, though the average freight-train load has been increasing. The earnings of a freight train per mile in 1879 were 11 per cent. less than in 1878 and 28 per cent. less than in 1875; but there has also been a continuous decrease in its expenses, though not enough to prevent the profits being less in 1879 than ever before, and a fifth less than in 1878. Of the passenger train's earnings last year 58.5 per cent. was absorbed by expenses; of the freight train's earnings, 69 per cent.

The average rate received per passenger per mile has not varied much in the five years, and the variation in the expense has been comparatively small—from 1.09 to 1.36 cents. The profit per passenger per mile was larger last year than in any other except 1877.

The average receipt per ton per mile has continued to decrease. It was, however, erroneously stated to be 0.70 cent last year in the report to the State Engineer and Surveyor. Dividing the freight earnings by the tonnage mileage of paying freight, we find it to be nearly 0.80 cent, as we have given it in our table. This, however, is a reduction of 12¼ per cent. in one year of 21 per cent. since 1877, and 37½ per cent. since 1875. The freight rates of 1878 would have given the company \$2,750,000 additional net earnings, or more than enough for a 3 per cent. dividend.

As for the expenses per ton per mile, the method in which expenses are charged by this company makes them appear unduly large. One patent fact is the charging of the *total* amount paid for foreign freight-car mileage to freight expenses, and crediting the receipts from foreign roads for car mileage to earnings (but not to freight earnings), instead of debiting or

crediting the difference, as the case might be, which is the usual practice. This alone makes an addition of about 0.05 cent per ton per mile to the expense, so that, on the usual basis of calculation, the total cost last year would fall rather below 0.5 cent per ton per mile. The expense is 8 per cent. less than in 1875, and 40 per cent. less than in 1875. The average profit is less in 1879 than ever before, the reduction in the expense per unit of traffic not nearly keeping pace with the reduction in the receipt.

The train service of the road last year was equivalent to 6.63 passenger trains and 16.6 freight trains each way daily (365 days in the year) over the whole mileage of road, and to 2.64 passenger trains and 6.55 freight trains each way daily per mile of track. It is thus evident that the road is, on the whole, far from being crowded with trains, but will bear an enormous addition to its traffic.

COUNSEL ON THE GAUGE QUESTION.

It was shown last week that the curves used on narrow gauge railroads are not of shorter radii than those in common use on standard-gauge lines, and that, of the latter, the two which have a larger number of trains than are run on any other road in the world have curves of shorter radii than any of the 59 narrow-gauge railroads of which we have received information, with the exception of one very short line. The claim, then, which is so generally made, that shorter curves can be used on a 3 ft. than on a standard gauge must be abandoned. It was also shown that the saving in the cost of a railroad due to the difference in the quantity of material required to do the grading is less than $\frac{1}{10}$ of one per cent.

The difference in the cost growing out of the additional foot in length of cross-ties can easily be calculated. In our table the expense for ties was given at $2\frac{1}{2}$ per cent. of the whole outlay. As the price of ties is about proportional to their length, the reduction of cost due to the use of 6 ft. instead of 7 ft. ties would be $\frac{1}{4}$ of $2\frac{1}{2}$ per cent. = 0.355 or a little over $\frac{1}{4}$ of 1 per cent.

The cost of ballast, in most cases, in estimating the cost of cheap railroads, would not require consideration, because such roads usually have no other ballast than the earth of which the embankments are formed or in which the cuts are excavated; but as this item is one of the elements of cost of our Western road, it should, to make the comparison quite fair, be taken into account. The expense of "ballast and ballasting track and settling of embankments" of the road referred to was 3.7 per cent. Taking the average width of ballast for the 3 ft. gauge at $8\frac{1}{2}$ ft., and for the light standard gauge at $9\frac{1}{2}$ ft., and assuming the cost to be proportional to this width, the former would be $\frac{1}{10}$ less than the latter; $\frac{1}{10}$ of 3.7 per cent. would be 0.389, or nearly 0.4 per cent., which represents what might be saved if 6 ft. ties are used in the one case instead of 7 ft. ties in the other.

The question of the difference in the cost of bridges was some time ago submitted to an experienced bridge-builder in the form of the following inquiry: "What would be the difference in cost of the bridges for a 3 ft. gauge road and for one of the same character if built of 4 ft. $8\frac{1}{2}$ in. gauge? The supposition being that the rolling stock, that is, engines and cars, are to be of the same kind and weight for each road, excepting so far as the weight is affected by the lengthening out of the axles and the spreading apart of the wheels."

In answer to this the following interesting analysis of the question was secured:

"In reply to your favor of yesterday, I will say that lately I had to make a complete series of estimates for iron narrow and standard-gauge bridges.

"For the 3 ft. gauge road engines were supposed with tenders 43 ft. long over all, weighing 1,350 lbs. per foot, which concentrate 26,000 lbs. on a wheel-base of 6 ft. and also 30,000 lbs. on 6-coupled wheels. The freight cars, loaded, to weigh 1,350 lbs. per lineal foot. Two engines ahead of a full freight train were the supposed live load.

"The width between the centre lines of through trusses was assumed at 12 ft., the body of a passenger car being 8 ft. wide. For through bridges of standard-gauge roads the trusses were supposed to be 15 ft. from centre to centre, and for the live load a train was assumed weighing 2,240 lbs. per lineal foot, headed by a locomotive concentrating 80,000 lbs. of driver weight on three or four axles, the wheel-base being from 12 to 15 ft. This was supposed in order to arrive at the maximum strains to which the floor would be subjected. Spans from 50 to 200 ft. were calculated, and the calculations were carefully checked. The light rolling stock, specified above, led to bridges on the average only 31 per cent. lighter than those for the heavy rolling stock, which is nearly double as heavy as the first.

"As far as cost is concerned, this percentage of 31 is to be reduced to 24, because workmanship per pound of iron would cost proportionally more as the bridges become lighter.

"In case the light rolling stock specified were placed on trucks, which by simply lengthening the axles and spreading the wheels were made to suit the standard gauge, but without altering the width of car-bodies and width between centres of trusses, standard-gauge railroad bridges would be obtained, which would give all the advantages expected from light rolling stock of cheap secondary railroads. Such bridges will weigh and cost the same as narrow-gauge

bridges, unless you draw into consideration that the weight being equal, the floor of a wide-gauge bridge in reality could be made a little lighter than for a narrow gauge.

"This can be proved by referring to the accompanying

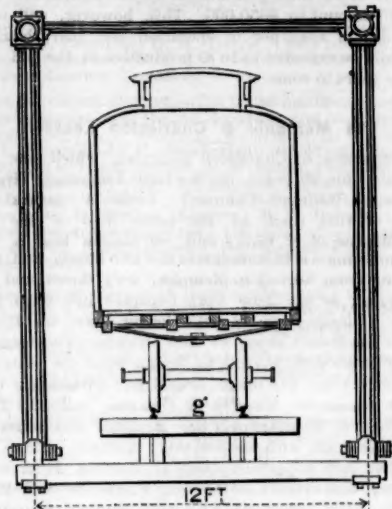


Fig. 1.

sketch, showing a floor-beam with wooden stringers below the rails.
"P" being the panel load for each rail, the width w between centres of trusses is 12 feet. The gauge g is either 4 ft. $8\frac{1}{2}$ in., or 3 ft.

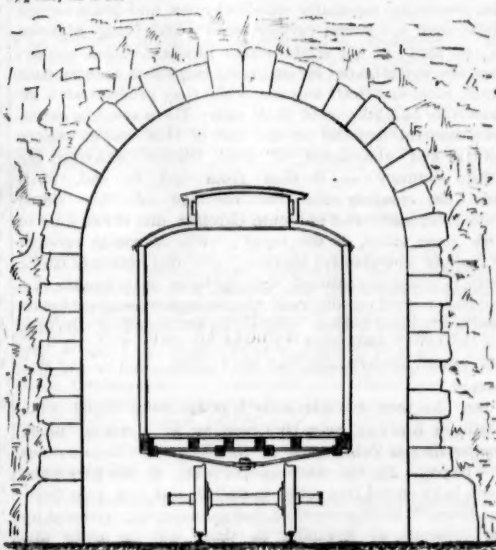


Fig. 2.

"The moment of flexure of the floor beam would be:
for $g = 4$ ft. $8\frac{1}{2}$ in. Moment = $43 \cdot 8$ in. $\times P$;
" $g = 3$ ft. " = 54 " $\times P$;

thus showing that a floor beam strong enough for a wide gauge bridge would have to be made 20 per cent. stronger

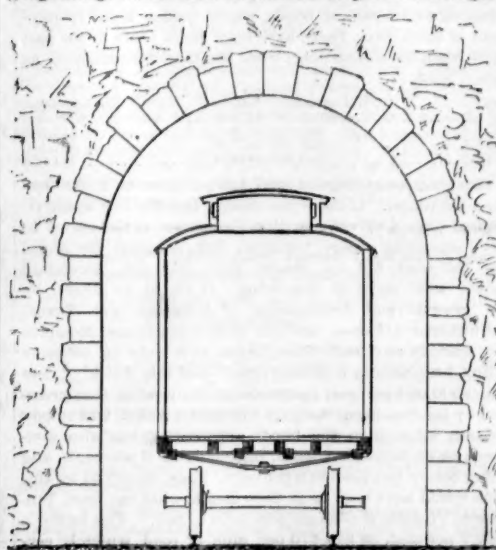


Fig. 3.

to suit the narrow gauge. Deck bridges of same width between trusses, ties being placed as usual directly upon the top chords, would likewise have to be 20 per cent. stronger for narrow-gauge rolling stock than for standard-gauge stock of same weight. In all other respects, both bridges, under the supposition of same weights of rolling stock, would be the same, and would cost the same amount of money."

Very little need be added to this statement. The reasons why a bridge to carry the same loads and of the same width will cost no more for the one gauge than for the other can hardly require any further demonstration. What is true for bridges is also true of

trestles and of bridge masonry. Culverts, however, would probably be somewhat increased in cost by the additional width of the embankments. In the tabular statement, published two weeks ago, the cost of "masonry for culverts and retaining walls" is given as an item. The latter would of course cost no more for a narrow than for a standard-gauge road, and the cost of culverts varies so much according to location that it is difficult to give any proportion of cost for lines of different gauges. Thus, if the culvert is near the grade line, its length measured crosswise to the track would be about equal to that of the ballast, or $8\frac{1}{2}$ ft. for the one and $9\frac{1}{2}$ ft. for the other, or a difference of $\frac{1}{10}$ in the quantity. If, however, the culvert is at the bottom of a 12-ft. embankment, its length would be from 30 to 40 ft. The difference, then, for the two gauges would be from $\frac{1}{10}$ to $\frac{1}{10}$. It should be kept in mind, too, that in this case, as in that of grading, the cost is not in proportion to quantity, but is considerably less, as much of the expense of doing such work consists in getting ready to do it. Unfortunately for our estimate, the cost of culverts and the cost of retaining walls of our Western road are not given separately, and it is obvious that they would bear no fixed relation to each other in different lines. On the road referred to, which was built through a rough country, and for the most part along the course of rapid streams, where retaining walls were frequently needed, doubtless the outlay for the latter was quite equal to that for culverts. The cost of the two kinds of structures was $2\frac{1}{2}$ per cent. of the total. Dividing them equally would give us $1\frac{1}{4}$ per cent. for culverts, making a very rough average between the difference of $\frac{1}{10} = 10.5$ per cent. and $\frac{1}{10} = 2.5$ per cent., we would have $6\frac{1}{2}$ per cent. as an average difference in the quantity of masonry required for culverts for roads of the two gauges. As the cost of culverts has been taken at $1\frac{1}{4}$ per cent. of the total, we have $6\frac{1}{2}$ per cent. of $1\frac{1}{4} = 0.08$ of 1 per cent—a difference so infinitesimal that it may be entirely disregarded in any estimates of cost, especially as it represents the difference in quantity; the cost itself would be even less than this. This, of course, is a very rough approximation or estimate of cost, but it indicates how very little difference there can be under any circumstances.

The rest of the items of cost need only to be enumerated to make it evident that there is no difference between them. As the slopes for roads of both gauges must be the same, it will cost as much to "re-surface settled embankments, remove slips and sloping material and maintenance of track during winter and spring prior to opening" for the one gauge as for the other.

"Right of way, fencing, cattle-guards, and road crossings" would be the same for each. It has been claimed that right of way would cost less for a 3-ft. gauge than for one of 4 ft. $8\frac{1}{2}$ in. To show how absurd such a claim is, let it be supposed that it was necessary to purchase the right of way for a tunnel for a 3-ft. gauge like that represented in section by fig. 2, and a similar right of way for a standard-gauge tunnel like that shown in fig. 3, how much difference would there be?

"Engine-houses, shop, machinery and tools, station-houses, furniture, mile-posts, water stations, pumping machinery, etc." would all be exactly alike in each case.

"Interest on bonds to opening of line," "Discount on bonds," "Taxes to opening of line," would all be the same for each gauge.

"Office expenses, officers' salaries, etc., and incidentals to opening of line," it would be difficult to diminish by narrowing the gauge; in fact, the experiment has been tried of dispensing entirely with a gauge, and running on a single rail, and we believe even then "office expenses, salaries and incidentals" accrued inexorably.

Let us sum up, then, the differences in cost due to the gauge.

| DIFFERENCE IN COST OF 3-FT. AND 4-FT.- $8\frac{1}{2}$ IN. GAUGE RAILROADS. | | |
|--|-------|-----------|
| | | Per cent. |
| Grading, in favor of 3-ft. gauge | ..... | 0.875 |
| Cross-ties, " " " | ..... | 0.355 |
| Ballast, " " " | ..... | 0.389 |
| Culverts, " " " | ..... | 0.080 |
| Total | ..... | 1.700 |

It should be kept in mind, too, that the largest item of difference—that of grading—represents the difference in quantity and not difference in cost, which would be considerably less, and that, in addition, the standard gauge has an advantage in the cost of freight on rolling stock, and also in cost of through bridges. The total difference then would be CONSIDERABLY LESS THAN $1\frac{1}{4}$ PER CENT. Our readers can judge whether this will compensate for all the inconvenience resulting from a break of gauge and transshipment of freight. The only advantage claimed for the narrow gauge is the saving in cost of construction. When

it has been proposed to build light standard-gauge roads, there has been a wild cry raised that the light rolling-stock could never be run with the heavy, nor *vice versa*; and yet now we find that a number of 3-ft.-gauge roads have laid down transfer pits or hoists for shifting the bodies of 3-ft.-gauge cars to standard-gauge trucks and *vice versa*. All this time and expense would be saved if, as has been proposed in these pages a number of times, the roads had been built on the narrow-gauge system, all excepting the gauge. It is, of course, true that a road can be built with the rails 3 feet apart and do a large and profitable business, but this is equally true of a light standard-gauge road. The claim that has been so persistently advanced, that a railroad will cost from a third to a fourth less if the rails are placed 3 ft. apart than it would if they are 4 ft. 8½ in. apart, is a delusion which, by persistent repetition, has come to be generally believed even by experienced railroad men. To the credit of the engineering profession, though, it must be said that at present it is impossible to name a single member of it in this country, who has achieved any eminence, who is an advocate or believer in the narrow-gauge theories, which now seem to be in a fair way of final explosion by the widening of a number of roads built on the "new system."

The First Year of the New York Elevated Railroads.

The report of the New York Elevated Railroad for the year ending with September last covers the first year during which the whole length of the road was operated, that is, about 8½ miles, from the Battery to Harlem, and 5 miles from the Battery to Fifty-ninth street. In that year 29,875,912 passengers were carried, and the earnings from passengers (all the other earnings were but \$4,546) were \$2,233,402, an average of 7.48 cents per passenger, and about \$165,540 per mile of road. The expenses of operation were \$1,171,339, for "operating the road," which in the New York schedule includes all working expenses except maintenance of road and maintenance of equipment. Under these latter heads only \$51,459 was expended on road and \$74,458 on rolling stock—thus bearing an extremely low proportion to the other working expenses. As this was the first year of operation for most of the road, these maintenance expenses were probably lower than they will be on the average hereafter. They will doubtless always be a smaller proportion of the total expenses than on ordinary railroads, at least for maintenance of road, because the train movement is extraordinarily great, the trains exceptionally light, and the road exceptionally durable and permanent—no ballasting to keep up, ties uninjured by bad drainage, no liability to floods, only the rails wearing out about as on other roads in proportion to the tonnage passing over them. The average expense per passenger carried was not quite 4 cents (3.92 cents). If a uniform fare of 5 cents had been charged at all hours, which has been strongly advocated by some of the city papers, the net profits (with the same traffic), would have been reduced from \$1,068,150 to \$322,660, or to little more than two-thirds of the interest on the bonds. Doubtless a 5-cent fare in the middle of the day would increase the traffic considerably, but certainly not enough to make up the difference in the rate. To do that it would be necessary for the number of passengers to become more than three times as great. As the road already carries at 5 cents during the four hours when traffic always is heaviest, and when the greatest bulk of the necessary travel must be done, this does not prove that some modification in rates, which would fill the trains when they now run more than half empty, might not prove profitable. It now costs as much to travel a quarter of a mile on this road as to ride the 8½ miles from the Battery to Harlem. On the Third Avenue line, which passes through a densely peopled district where most of the residents are not very rich and many are very poor, and which passes close to some of the leading retail centres, most people would rather pay five cents to ride a mile, many to ride two miles, and not a few to ride three miles, on the street cars, rather than pay 10 cents on the elevated road. But it would not by any means be an easy matter to provide for the collection of different rates for different distances on this road.

The enormous net earnings of \$79,122 per mile were all absorbed except \$28,660 by the payments of interest, the 10 per cent. dividends on the stock, and a payment of less than \$28,000 to the city of New York as a sort of charter tax. The traffic of this road will doubtless increase (at least till the Second Avenue line is opened), but it is not at all certain that the expenses will be so low hereafter, now that prices have risen and after the road and rolling stock have had time enough to wear out a little. The cost of the road and equipment is reported at just about \$1,000,000 per mile; this is the cost in stock and bonds. The contract for constructing it could be, or could have been, let for cash for less than one-half of that amount, doubtless.

The Metropolitan Elevated Railway has also rendered its report for the same year, during the whole of which its line from Trinity Church to Central Park was open, and during three-fourths of it the line through Fifty-third street giving access to one additional important station, while later, one after the other, it was opened to three or four other stations, only one of which, however, yielded any considerable amount

of traffic during the year in question. It shows for the year a profit of \$576,456, while the bonds outstanding at the close of the year require \$304,920 for interest, and the 10 per cent. dividends on the stock guaranteed by the Manhattan Company will amount to \$650,000. This, however, will cover a great deal of road not in operation last year, though it can hardly be expected to be as productive as the old road for some years to come.

The Memphis & Charleston Lease.

The Memphis & Charleston Railroad, which has just been leased for 20 years to the East Tennessee, Virginia & Georgia Railroad Company, forms a natural extension of that road, as the latter does of the Atlantic, Mississippi & Ohio; and we believe that a part of the programme is to consolidate the two latter, and thus form a line from Norfolk to Memphis, very direct, and just about as long as the New York Central's line from New York to Chicago, and 47 miles longer than the Illinois Central's line from Chicago to New Orleans. The distances being 408 miles from Norfolk to Bristol over the Atlantic, Mississippi & Ohio, 242 from Bristol to Chattanooga over the East Tennessee, Virginia & Georgia, and 310 from Chattanooga to Memphis over the Memphis & Charleston, or 960 miles in all, with few and short branches. There are on this line such important places as Norfolk, Petersburg, Lynchburg, Knoxville, Chattanooga, Huntsville and Memphis. The route enters the Alleghany range of mountains about 200 miles west of Norfolk, and only leaves it at Huntsville, 97 miles east of Memphis; 660 miles of it, therefore, are between or alongside of ridges of this range. This is very far from a desolate country, however, the valleys in these mountains being pretty wide, and frequently very fertile, producing especially excellent grass and grain—much better than are found further south; and being adjacent to the parts of the South which produce cotton chiefly, they are well situated for supplying the cotton country with grain, meat and draft animals, while they produce not a little cotton and tobacco of their own. There are, too, extensive mineral deposits on the line of this road at various points, and abundance of good timber. Skirting the cotton country, as it does from end to end, it is able to compete for the carriage of this staple from every state west of South Carolina, and it has done so with great effect, as the rapid growth of cotton receipts at Norfolk abundantly testifies. For this through traffic there is great competition, but for most of its length this line has no rival parallel road near enough to compete for its local traffic; and indeed, considering the length of the line, the number of cross-roads is small—three in Virginia, two in Tennessee, one in Georgia, one in Alabama, and two in Mississippi.

The Memphis & Charleston was formerly leased to the Southern Railway Security Company at a rental much greater than it could earn or the Security Company was able to pay. Its net earnings per mile in the past eight years have varied from \$685 to \$2,049, and last year (ending June 30, 1879) were \$791, being materially reduced by the epidemic at Memphis, as they will be again this year. The road has been worked since June, 1877, by the East Tennessee, Virginia & Georgia, but without any liability for rental. The lessee returned the entire net earnings to the lessor, paying them out for interest on the bonds, and the balance, if any, to the company. The telegraphic announcement of the lease says that now a fixed rental will be paid, the lessees guaranteeing 7 per cent. interest on \$4,225,000 of bonds, which makes a yearly payment of \$295,750. There have been three years in the past eight when the net earnings were less than that amount, as shown below:

| Year. | Net earnings. | Year. | Net earnings. |
|-------------|---------------|-------------|---------------|
| 1871-2..... | \$241,185 | 1875-6..... | \$321,230 |
| 1872-3..... | 361,565 | 1876-7..... | 317,523 |
| 1873-4..... | 333,409 | 1877-8..... | 307,445 |
| 1874-5..... | 183,495 | 1878-9..... | 231,038 |

This gives an average of \$287,122 per year, or \$8,600 less than the rental. If there was danger that the line would be secured by a rival, the East Tennessee could afford to pay something more than its net earnings for rental for this road; but the leased road has not heretofore shown any signs of improving. It ought to profit by the growth and development of Arkansas and Texas; but hitherto Arkansas has not grown much, and Memphis gets scarcely any traffic from Texas, as it lacks an effective railroad connection with that state. But this rental of less than \$300,000 per year contrasts strongly with that promised by the Southern Security Company, which was to pay not only interest on the bonds outstanding, but also dividends on \$5,312,725 of stock, beginning at 3 per cent., and rising before this time to 6 per cent. Thus, the rental by this time would have been more than double what the East Tennessee, Virginia & Georgia will have to pay. This latter is only 7 per cent. on \$14,470 per mile of road, which is certainly a very small amount.

Record of New Railroad Construction.

This number of the *Railroad Gazette* contains information of the laying of track on new railroads as follows:

Chicago & Strawn.—Track laid from Strawn, Ill., north by east 34 miles.

Illinois Central.—The track of the *Chatsworth Division* is extended from Chatsworth, Ill., southwest to Strawn, 17 miles.

Milwaukee, Lake Shore & Western.—Extended from Marion, Wis., to Tigerton, 12 miles.

Atchison & Nebraska.—Extended from Seward, Neb., northwest to Ulysses, 12½ miles.

St. Louis, Kansas & Arizona.—Extended from Garnett, Kan., southwest to Leroy, 24 miles.

Central & Montgomery.—Extended from Plantersville, Tex., eastward to Montgomery, 13 miles.

Sioux City & Dakota.—Extended from Beloit, Ia., north to Sioux Falls, Dak., 25 miles.

St. Paul & Sioux City.—The *Black Hills Branch* is extended from Summit Lake, Minn., westward to Woodstock, 12 miles.

This is a total of 149¼ miles of new railroad, making 8,594 miles thus far this year, against 2,243 miles reported for the corresponding period in 1878, 1,994 in 1877, 2,283 in 1876, 1,264 in 1875, 1,808 in 1874, 3,606 in 1873, and 7,065 in 1872. The new mileage now reported is only 12 miles behind that at the same time in 1873.

NEW PUBLICATIONS.

Les Chemins de Fer en Amérique.—We have heretofore noticed that a French work was in preparation on American railroads by two of the European Commissioners to our Centennial Exhibition, E. Lavoigne, who holds the rank of Engineer-in-Chief in the French Corps des Ponts et Chaussées, and E. Pontzen, who represented Austria at the Exhibition, and has published a short report in German on our railroads, but was educated at the French Ecole des Ponts et Chaussées, and has lived in Paris most of the time since the Exhibition. We have now received the first volume of the work, which promises to be the most complete ever written in any language on the subject of American railroads. At this time we aim only to give a very slight description of the work, postponing further notice until after a more critical examination. This first volume has 547 pages of print with an accompanying atlas of 39 plates, all but one of which are on sheets 12 x 24 in., the exception being a map of the railroads of the United States, which is much larger. This first volume is devoted to "Construction," but is prefaced by a "Geographical View" of the country, and a brief historical sketch of railroad construction in the United States and Canada. Under the general head of "Substructure," there are chapters on "Location," "Cross Sections," "Structures, including Bridges" (a chapter of 156 pages, illustrated by 19 of the large plates), followed by another chapter on "Foundations," and one on "Tunnels," likewise well illustrated. The second part, on "Superstructure," has a single chapter of 70 pages on "Track." The third part, "Stations, Yards and Signals," has chapters on "Stations," and "Signals;" the fourth part is on "Cost," and gives prices of materials, wages, interest on capital, land damages, and cost of earthwork, masonry, bridges, superstructure, rolling stock, stations, etc.

The second and final volume of this work will be devoted to "Operation."

There will doubtless be many who will desire to examine this book for themselves. To assist those in procuring it we will say that the price of this volume, with its atlas of plates, is 45 francs in Paris, and that foreign booksellers usually import such books at the rate of about 35 cents per franc. Among importing booksellers are G. E. Stechert, L. W. Schmidt, F. W. Christern, and B. Westermann & Co., in New York.

General Railroad News.

MEETINGS AND ANNOUNCEMENTS.

Meetings.

Meetings will be held as follows:
Connecticut River, annual meeting, at the office in Springfield, Mass., Jan. 21, at noon.
Cleveland & Pittsburgh, annual meeting, at the office in Cleveland, O., Jan. 7.
Pittsburgh & Lake Erie, annual meeting, at the office in Pittsburgh, Pa., Jan. 12, at noon.

Dividends.

Dividends have been declared as follows:
Burlington & Missouri River in Nebraska, an extra dividend of 2½ per cent., payable Dec. 24.
Republican Valley (leased to Burlington & Missouri River in Nebraska), an extra dividend of 2½ per cent., payable Dec. 24.
Union Pacific, 1½ per cent., quarterly, payable Jan. 1.
Fitchburg, 3 per cent., semi-annual, payable Jan. 1.
Boston & Lowell, 2 per cent., semi-annual, payable Jan. 1.
Boston, Revere Beach & Lynn, 3 per cent., semi-annual, payable Dec. 20.
Lake Shore & Michigan Southern, 4 per cent., payable Feb. 1. The last dividend was 2½ per cent., paid Aug. 1.
Michigan Central, 4 per cent., payable Feb. 3. The last dividend was 1½ per cent., paid in August.
Georgia, 3 per cent., semi-annual.

Foreclosure Sales.

The *Lewisburg, Centre & Spruce Creek* road was sold under foreclosure in Philadelphia, Dec. 13, and bought for \$50,000 by Strickland Kneass, for account of the Pennsylvania Railroad Company, which holds all the bonds. The line of the road is from Montandon, Pa., to Tyrone, 86 miles, but only 43 miles, from Montandon to Spring Mills, are completed. It has always been worked by the Pennsylvania.

The *Kansas City, Memphis & Mobile* property, consisting of 40 miles of graded road-bed, franchises, right of way, etc., was sold in Kansas City, Mo., Dec. 15, and bought for \$19,500 by Mr. Cross, of Emporia, Kan., and Mr. Lyman, of Kansas City. It has been sold several times before. It is said that the purchasers mean to use the property as part of a line from Kansas City to intersect the Missouri, Kansas & Texas.

The *Indianapolis, Cincinnati & LaFayette* road is now advertised to be sold in Cincinnati, Feb. 2, under foreclosure of mortgage.

The *Cairo & Vincennes* road is to be sold in Springfield, Ill., Jan. 5, under a decree granted by the United States Circuit Court. The road extends from Cairo, Ill., to Vincennes, Ind., 157 miles, and the bonded debt is \$5,000,000, not including overdue coupons. The net earnings last year were only \$3,592, or not quite \$23 per mile.

Call for Meeting of the Joint Executive Committee.

The December meeting of the Joint Executive Committee will be held at the Grand Pacific Hotel, Chicago, on the 18th, at 11 a. m. The subjects to be acted upon are as follows:

1. *The Revision of East Bound Classification.* Since new classification was put into effect Nov. 10, communications asking for certain changes have been received, which have been referred to the Committee on Classifications, to report to this meeting.

2. *The Revision of Tariff to New England Interior Points,* to prevent absorption of arbitraries, and to fix uniform arbitraries by all routes.

3. *The Adjustment of Rates from Evansville, New Albany, etc.*

4. *The Special Committee of Terminal Roads* at points from which traffic has been and is to be divided will meet and perfect their agreements.

5. *The Maintenance of Passenger Rates* and consideration of the report of the meeting of General Passenger Agents, Sept. 11 and 12, 1879.

Any other subject relating to the business of the Joint Executive Committee may be brought before the meeting.

ALBERT FINK, Chairman.

Kansas City Passenger Meeting.

A meeting of passenger agents of the roads running east from Kansas City was held in that place Dec. 10. The object of the meeting was to revise and if possible make strong the compact of September 12, to adhere to tariff rates and fix a more effective means of punishment for possible transgressions. Members present seemed entirely agreed on the action before them. The original compact was reaffirmed, and only changed in one or two unimportant particulars. There were present James Charlton, Chicago & Alton; C. K. Lord, Wabash, St. Louis & Pacific; Frank Fowler, Missouri Pacific; A. C. Dawes, Kansas City, St. Joseph & Council Bluffs; F. E. Morse, Hannibal & St. Joseph; E. St. John, Chicago, Rock Island & Pacific.

Colorado Pool Meeting.

A meeting is to be held in Denver, Dec. 20, to adjust matters in relation to Colorado business and to make up a pool agreement for the ensuing year.

National Board of Trade.

At a meeting of this body in Washington, Dec. 11, after a speech by Mr. Simon Sterne, on motion of Mr. F. B. Thurber, of New York, the following resolutions were adopted:

"Resolved, That in the opinion of this Board, it is desirable to secure national legislation upon inter-state commerce by railroad, and that said legislation should embody the following provisions:

"First—To raise a special commission or tribunal to secure uniformity and publicity in railway accounts and publicity of railway contracts and transactions.

"Second—To enforce provisions securing uniformity of rates and classifications under like circumstances, and relative equality where circumstances differ.

"Third—Publicity of rates and prohibition of sudden and arbitrary changes.

"Fourth—Prevention of extortionate charges and of personal or local favorites."

ELECTIONS AND APPOINTMENTS.

Atchison, St. Joseph & Northern.—The directors of this new company are: D. Martin, J. P. Pomeroy, B. P. Waggener, Atchison, Kan.; John Doniphan, Joseph Hansen, L. D. Tuthill, St. Joseph, Mo.; S. H. H. Clarke, Omaha, Neb.; Jay Gould, New York.

Baltimore & Ohio.—Mr. C. S. Wright has been appointed Assistant General Freight Agent for the Trans-Ohio Division, from Jan. 1, in place of C. M. Wicker, resigned. Mr. Wright has had charge of the freight business at Cincinnati.

Boston, Hoosac Tunnel & Western.—Mr. F. L. Pomeroy has been appointed General Freight and Passenger Agent, with office at North Adams, Mass.; appointment dating Dec. 10.

Boston & Maine.—At the annual meeting in Lawrence, Mass., Dec. 10, the old board was re-elected, as follows: Nathaniel W. Farwell, Lewiston, Me.; Samuel E. Spring, Portland, Me.; Wm. S. Stevens, Dover, N. H.; Amos Paul, South Newmarket, N. H.; James R. Nichols, Haverhill, Mass.; Nathaniel G. White, Lawrence, Mass.; John Felt Osgood, Nathaniel J. Bradlee, George C. Lord, Boston.

Canadian Pacific.—Mr. C. Schreiber, Engineer in Chief of the Intercolonial Railway, has been placed in charge of the construction work now in progress on this road.

Chicago & Alton.—It is stated that no successor to Mr. Van Horne as General Superintendent will be appointed, but that Mr. C. H. Chappell will be appointed Assistant General Manager Jan. 1. Mr. Chappell grew up on the Chicago, Burlington & Quincy, and has served on the Missouri, Kansas & Texas, and is now Superintendent of the Illinois Division of the Wabash, St. Louis & Pacific. He is esteemed extraordinarily skillful in the management of trains.

Chicago, Burlington & Quincy.—Mr. D. V. Touzalin has been appointed General Agent of the St. Louis Division. He has been for some time agent at Rock Island.

Cincinnati Southern.—Mr. W. N. Beatty has been appointed Assistant Superintendent Southern Division, and Mr. Samuel Hunt Assistant Superintendent Northern Division, to date from Jan. 1.

Denver, South Park & Pacific.—The following appointments are announced: W. B. Rundle, Superintendent of Telegraph; J. A. Huntington, Train Dispatcher; James H. Kirk, Master Mechanic; J. P. Pringle, Storekeeper and Fuel Agent.

Eastern.—At the annual meeting in Boston, Dec. 10, the following directors were chosen: For the stockholders, Wm. B. Bacon, Richard Olney, Stephen J. Young, for the holders of the mortgage certificates, John Cummings, George F. King, George S. Morison, Alfred P. Rockwell, Jacob C. Rogers, E. B. Phillips. Messrs. Bacon, Olney, Young and Rogers are new directors, succeeding Willard P. Phillips, James W. Johnson, George W. Gill and Samuel C. Lawrence.

East Tennessee, Virginia & Georgia.—At the annual meeting in Knoxville, Dec. 5, the following directors were chosen: R. C. Jackson, Joseph Jaques, C. M. McGhee, E. J. Sanford, Knoxville, Tenn.; Joseph R. Anderson, Bristol, Tenn.; Wm. C. Kyle, Whitesburg, Tenn.; S. D. Reynolds, Loudon, Tenn.; Dr. W. R. Sevier, Jonesboro, Tenn.; R. H. Richards, Atlanta, Ga.; Thomas G. Barrett, Augusta, Ga.; B. F. Newcomer, W. T. Walters, Baltimore; Adrian Iselin, M. K. Jesup, R. T. Wilson, New York. The board afterward re-elected R. T. Wilson, President; C. M. McGhee, Vice-President; James G. Mitchell,

Secretary and Treasurer. The other officers were continued without change, as follows: O. H. P. Rogan, Auditor and Paymaster; Major J. F. O'Brien, Superintendent and Chief Engineer; J. B. Hoxsie, Master of Transportation; James R. Ogden, General Freight and Passenger Agent.

Galena & Wisconsin.—The new board has re-elected Frederick Stahl, President; D. S. Harris, Vice-President; A. J. Hellman, Superintendent; J. J. Gray, Secretary and Auditor; John Lorrain, Treasurer.

Kansas City & Eastern.—The board has been reorganized by the resignation of the old directors and the election of the following: S. T. Smith, J. W. Griffith, H. C. Clements, D. E. Cornell, J. C. Brinkerhoff, E. H. Allen, H. M. Holden. The board elected S. T. Smith, President; J. W. Griffith, Secretary; H. C. Clements, Treasurer; H. Hale, General Superintendent; John Iverson, Assistant Superintendent; C. D. McCoy, Auditor; B. F. Roberts, Cashier. The last two are re-appointed; the other officers and directors are all connected with the Kansas Pacific or the Missouri Pacific.

Knoxville & Ohio.—At the annual meeting in Knoxville, Tenn., Dec. 4, the old board was re-elected as follows: R. C. Jackson, C. M. McGhee, E. J. Sanford, Knoxville; Stanley Matthews, Cincinnati; W. T. Walters, Baltimore; Adrian Iselin, R. T. Wilson, New York. The board re-elected C. M. McGhee President; John L. Moses, Secretary and Treasurer.

Lake Erie & Western.—The first board of directors of the consolidated company are George I. Seney, Watson H. Brown, John T. Martin, E. H. R. Lyman, Alexander M. White, C. R. Cummings, J. H. Cheney, Daniel P. Ellis, Charles Foster, Calvin S. Price and John S. Newberry.

Louisville, Cincinnati & Lexington.—Mr. James A. Baird has been appointed Auditor, in place of Mr. Mahl, appointed General Superintendent. Mr. Baird is an experienced accountant, and is now City Book-keeper of Louisville.

Louisville & Nashville.—Mr. Edward K. Green has been chosen second Vice-President, and will take charge of the office in New York.

New York & Manhattan Beach.—The old officers have been re-elected as follows: Austin Corbin, President; J. B. Upham, Vice-President; G. S. Moulton, Secretary and Treasurer; J. B. Upham, D. C. Corbin, G. S. Moulton, Executive Committee.

Pennsylvania.—A circular dated Dec. 10 says: "In consequence of the death of Mr. Stephen B. Kingston, late General Freight Agent, the duties assigned under the organization to that office will, until further notice, be in charge of Mr. A. J. Cassatt, Third Vice-President. Mr. J. McC. Creighton, Manager of the Empire Line, will aid the Third Vice-President, and perform such duties as may be assigned to him."

Peoria, Decatur & Evansville.—At a meeting held in Pekin, Ill., Dec. 8, this company, formed by the consolidation of the Pekin, Lincoln & Decatur and the Decatur, Mattoon & Southern, was organized by the election of the following directors: C. R. Cummings, George I. Seney, John T. Martin, E. H. R. Lyman, John B. Cohrs, Edward Richards, Eli Wiley. The board elected C. R. Cummings President; John B. Cohrs, Vice-President; B. G. Mitchell, Secretary; R. A. Bunker, Treasurer.

The following appointments are also announced: George L. Bradbury, General Manager; G. R. Cobleigh, Superintendent and Purchasing Agent; L. M. Rupert, General Passenger and Ticket Agent; O. W. Bell, Train Dispatcher and Superintendent of Telegraph; Isaac Adams, Master Mechanic.

All communications relative to their respective departments should be addressed to them at Pekin, Ill. All communication relating to the Freight Department should be addressed to the General Manager.

Salisbury Beach.—The directors of this company are: E. F. Bartlett, C. A. Benjamin, A. F. Clark, Henry P. Moulton, E. T. Northend, W. D. Northend, W. W. Northend, Nathaniel Pierce, E. F. Tibbets.

Susquehanna & Clearfield.—The directors of this new company are: A. J. Cassatt, John P. Green, Strickland Kneass, Wistar Morris, George B. Roberts, N. Parker Shortridge, Edmund Smith. They are all officers of the Pennsylvania. Mr. George B. Roberts is President.

Vicksburg, Shreveport & Pacific.—This company has been organized by the bondholders who bought the Vicksburg, Shreveport & Texas road, and who elected the following directors: L. P. Grant, Edward Hoopes, Henry R. Jackson, Henry B. Plant, Alfred B. Pittman, Edmund Richardson, Thomas M. Smedes, Wm. M. Wadley. The board includes three prominent railroad men, Mr. Wadley, President of the Central of Georgia; Mr. Plant, President of the Savannah, Florida & Western (the old Atlantic & Gulf), and Mr. Grant, General Superintendent of the Atlanta & West Point.

Virginia Railroad Commissioner.—The Virginia Legislature has elected Capt. Asa Rogers, Jr., Railroad Commissioner, in place of Col. Thomas H. Carter. Col. Carter's term, however, does not expire for over a year yet.

PERSONAL.

—Mr. R. M. Shoemaker, of Cincinnati, President of the Cincinnati, Hamilton & Dayton Company, was stricken with paralysis Dec. 15, while riding in a street car. It is not known yet how serious the stroke may be.

—Gen. Wm. Mahone, President of the Atlantic, Mississippi & Ohio Company since its organization, has been chosen United States Senator from Virginia for the term beginning March 4, 1881.

—Mr. C. M. Wicker has resigned his position as Traffic Manager and Assistant General Freight Agent of the Trans-Ohio Divisions of the Baltimore & Ohio Railroad, to take effect Jan. 1.

—Sir Henry Tyler, President of the Grand Trunk Railway, and for many years Chief Inspector of Railways to the British Board of Trade, is the Conservative candidate for Parliament for Harwich.

—Mr. Edward Shipley Ellis, for four years past chairman of the Midland Railway Company of England, and a son of the first chairman of that company, died early in this month. He seems to have been something of an innovator in England. He once examined the railroads of this country, and after his return he introduced on the Midland road Pullman sleeping cars, other passenger cars on trucks, and reduced the number of classes of passengers from three to two; his road was, we believe, the first in England to use the Westinghouse brake. Mr. Ellis was a Quaker, a strong advocate of total abstinence, and active in many charitable and educational enterprises.

TRAFFIC AND EARNINGS.**Railroad Earnings.**

Earnings for various periods are reported as follows:

| Eleven months ending Nov. 30: | 1879. | 1878. | Inc. or Dec. | P. c. |
|--------------------------------------|-------------|-------------|--------------|---------------|
| Cairo & St. Louis. | \$242,472 | \$212,644 | I. | \$29,828 14.0 |
| Central Pacific. | 15,840,127 | 16,174,533 | D. | 334,406 2.1 |
| Chi. & N. W. | 14,771,290 | 13,918,902 | I. | 852,388 6.1 |
| Chi. St. Paul & Minn. | 1,047,255 | 845,468 | I. | 201,787 23.9 |
| Cleve. Mt. V. & Del. | 363,934 | 348,421 | I. | 15,513 4.4 |
| Ill. Central, Ill. lines. | 1,034,491 | 5,095,342 | D. | 40,851 1.2 |
| Ill. Central, Iowa lines. | 1,334,557 | 1,420,231 | D. | 85,674 6.9 |
| Int. & Gt. Northern. | 1,554,583 | 1,403,306 | I. | 151,277 10.8 |
| Louisville & Nashville. | 5,308,404 | 4,849,257 | I. | 459,207 9.5 |
| St. L., A. & T. H., Belleville line. | 490,892 | 457,622 | I. | 33,270 8.5 |
| St. Paul & Sioux City. | 1,030,938 | 1,004,389 | I. | 26,549 2.6 |
| Wabash. | 4,041,492 | 4,003,558 | D. | 37,934 0.9 |
| Ten months ending Oct. 31: | | | | |
| At. Miss. & Ohio. | \$1,306,315 | \$1,390,324 | D. | \$83,009 6.3 |
| Net earnings. | 570,998 | 428,414 | I. | 142,584 33.3 |
| B. & O. Cedar Rap. & No. | 1,210,900 | 1,273,497 | D. | 62,597 4.9 |
| Net earnings. | 414,491 | 392,090 | I. | 22,401 5.7 |
| Ches. & Ohio. | 1,009,303 | 1,019,220 | D. | 9,917 0.9 |
| Net earnings. | 208,111 | 208,952 | D. | 841 0.4 |
| Chicago & Alton. | 4,601,501 | 4,381,193 | I. | 220,308 5.0 |
| Net earnings. | 2,048,038 | 1,718,500 | I. | 329,538 19.2 |
| Chicago, Bur. & Quincy. | 12,013,808 | 11,746,896 | I. | 266,912 2.3 |
| Net earnings. | 5,933,040 | 5,417,266 | I. | 515,774 9.5 |
| Int. & Gt. No. | 1,312,780 | 1,169,365 | I. | 143,415 12.3 |
| Net earnings. | 375,319 | 404,061 | D. | 28,742 7.1 |
| Mobile & Montgomery. | 545,506 | 509,239 | I. | 36,267 7.1 |
| Net earnings. | 162,750 | 158,089 | I. | 4,661 2.9 |
| Nash., Chatt. & St. Louis. | 1,440,970 | 1,325,136 | I. | 115,834 8.7 |
| Net earnings. | 523,700 | 436,543 | I. | 87,157 20.0 |
| St. L., Iron Mt. & So. | 3,080,366 | 2,510,715 | I. | 569,651 22.7 |
| Net earnings. | 1,510,500 | 1,507,832 | I. | 2,668 0.2 |
| Southern Minn. | 511,730 | 555,305 | D. | 43,575 8.5 |
| Net earnings. | 266,508 | 261,023 | I. | 5,485 2.0 |
| Seven months ending Oct. 31: | | | | |
| Carolina Central. | \$231,563 | \$211,052 | I. | \$20,511 9.7 |
| Net earnings. | 73,796 | 68,801 | I. | 4,995 7.0 |
| Three months ending Oct. 31: | | | | |
| Flint & Pere Marquette. | \$344,820 | \$298,025 | I. | \$46,795 15.5 |
| Month of October: | | | | |
| Carolina Central. | \$56,490 | \$53,856 | I. | \$2,634 4.7 |
| Chi., Bur. & Quin. | 1,709,932 | 1,308,348 | I. | 401,584 30.7 |
| Del. & Hudson. | 475,208 | 429,247 | I. | 45,961 10.7 |
| Net earnings. | 242,145 | 208,008 | I. | 34,137 16.4 |
| Northern Pacific. | 384,548 | 339,404 | I. | 45,144 13.3 |
| Net earnings. | 178,697 | 77,540 | I. | 101,157 130.5 |
| Month of November: | | | | |
| Cairo & St. Louis. | \$23,029 | \$19,094 | I. | \$3,935 20.6 |
| Central Pacific. | 1,487,000 | 1,537,419 | D. | 50,419 3.3 |
| Chi. & N. W. | 1,537,000 | 1,407,240 | I. | 149,760 10.6 |
| Cleve., Mt. V. & Del. | 33,598 | 34,537 | D. | 939 2.7 |
| Flint & Pere Marquette. | 113,808 | 97,724 | I. | 16,084 16.6 |
| Ill. Central, Ill. lines. | 474,900 | 491,147 | D. | 16,247 3.3 |
| Ill. Central, Iowa lines. | 135,311 | 127,755 | I. | 7,556 5.9 |
| Int. & Gt. Northern. | 241,803 | 234,001 | I. | 7,802 3.3 |
| Louisville & Nashville. | 689,500 | 591,370 | I. | 98,130 14.3 |
| Minn. & St. Louis. | 49,908 | 29,401 | I. | 20,507 41.2 |
| Northern Pacific. | 202,465 | 103,741 | I. | 98,724 95.2 |
| St. L., A. & T. H., Main line. | 100,571 | 76,375 | I. | 24,196 31.7 |
| St. L., A. & T. H., Belleville line. | 52,610 | 51,187 | I. | 1,423 2.8 |
| St. Paul & Sioux City. | 122,583 | 111,619 | I. | 10,964 9.8 |
| Wabash. | 470,272 | 452,740 | I. | 17,532 3.9 |
| First Week in December: | | | | |
| Chi. & Eastern Ill. | \$23,007 | \$16,820 | I. | \$6,187 37.2 |
| St. L., Iron Mt. & So. | 181,935 | 131,818 | I. | 50,117 34.9 |
| Week ending Dec. 6: | | | | |
| Grand Trunk. | \$190,381 | \$173,504 | I. | \$16,877 9.7 |

Grain Movement.

For the week ending Dec. 6, receipts and shipments of grain of all kinds at the eight reporting northwestern markets and receipts at the seven Atlantic ports have been, in bushels for the past seven years:

| Northwestern shipments. | | Atlantic receipts. | |
|-------------------------|-----------|--------------------|-----------|
| Year. | Receipts. | By rail. | By water. |
| 1873. | 2,227,076 | 1,231,830 | 1,000.0 |
| 1874. | 2,303,488 | 451,402 | 1,000.0 |
| 1875. | 2,146,202 | 1,147,092 | 1,000.0 |
| 1876. | 2,008,871 | 1,424,702 | 584,169 |
| 1877. | 2,096,702 | 1,311,260 | 785,442 |
| 1878. | 4,047,916 | 1,696,302 | 2,351,614 |
| 1879. | 4,170,956 | 1,366,540 | 2,804,416 |

The Northwestern receipts for the week this year are the largest for four weeks; but the Northwestern shipments are the smallest since January. There is usually a great falling off when navigation closes. The shipments by lake were trifling and were the last of the season. The rail shipments are the largest for four weeks, and twice as large as in the preceding week.

The receipts at Atlantic ports were a sixth larger than in the week preceding, and 59 per cent. greater than in the corresponding week of last year. There were arrivals by canal in the week, and probably will be the following week, though the canal closed with that week. Boats that had reached Troy on the 6th went down the Hudson at their leisure.

Of the Northwestern receipts 45.1 per cent. was at Chicago, 17.8 at St. Louis, 17 at Milwaukee, 6.8 at Toledo, 6 at Detroit, 4 at Peoria, and 3.3 per cent. at Cleveland.

Of the receipts at Atlantic ports, 67.5 per cent. was at New York, 12.7 at Baltimore, 6.9 at New Orleans, 6.7 at Philadelphia, 5.5 at Boston, and 0.7 at Portland. New York has seldom of late years had so large a proportion of the whole; and the receipts of New Orleans are the largest since April 12, yet not very large. There have been six weeks this year when they were larger, and one when they were nearly twice as large.

Deliveries of grain at New York by canal and rail during the three fall months have been:

| —1878. | | —1879. | |
|------------|-----------|------------|-----------|
| By rail. | By water. | By rail. | By water. |
| September. | 6,041,056 | 5,090,501 | 5,587,144 |
| October. | 3,461,208 | 14,167,455 | 7,411,095 |
| November. | 3,802,005 | 9,938,397 | 3,837,382 |

Total, 13,304,269 34,156,253 16,855,621 33,715,402

For the whole period, therefore, there was an increase of

25.8 per cent. in the rail deliveries and a trifling decrease of 1.3 per cent. in the canal deliveries. Of the total receipts, 30 per cent. was by rail this year, against 28.1 per cent. last year.

Coal Movement.

Coal tonnages reported for the week ending Dec. 6 were as follows:

| | 1879. | 1878. | Increase. | P. c. |
|-------------------------------|---------|---------|-----------|-------|
| Anthracite..... | 536,656 | 293,419 | 243,237 | 82.9 |
| Semi-bituminous..... | 89,108 | ..... | ..... | ..... |
| Bituminous, Pennsylvania..... | 67,295 | ..... | ..... | ..... |
| Coke, Pennsylvania..... | 37,307 | ..... | ..... | ..... |

A partial curtailment of anthracite production over the holidays has been resolved on, to continue from Dec. 24 to Jan. 5. The Reading and the New Jersey Central will stop altogether; the Delaware & Hudson and the Pennsylvania Coal Company will work two-thirds time and the Delaware, Lackawanna & Western, three-quarters time. What the Lehigh Valley will do is not announced.

The coal tonnage of the Pennsylvania Railroad for the eleven months to the end of November was as follows:

| | 1879. | 1878. | Increase. | P. c. |
|----------------------|-----------|-----------|-----------|-------|
| Anthracite..... | 951,009 | 701,408 | 249,601 | 35.6 |
| Semi-bituminous..... | 1,780,479 | 1,482,813 | 297,666 | 20.1 |
| Bituminous..... | 1,025,507 | 1,403,682 | 221,885 | 15.8 |
| Coke..... | 1,285,065 | 974,009 | 311,806 | 32.0 |
| Totals..... | 5,043,020 | 4,561,972 | 1,081,048 | 23.7 |

The increase in coke is especially notable, though all branches of the trade show a considerable gain.

In the matter of the bill filed by the executors of the McCreey estate against the Receivers of the Lehigh & Wilkes-Barre Coal Company, alleging mismanagement of the trust, the Court has refused the prayers of the petitioners, save the right to appear before a master, which they had before.

Lake Vessels.

There are in winter quarters at Chicago 16 steam barges and tows, 19 propellers, 94 schooners regularly engaged in the grain trade, with an aggregate capacity of 4,283,000 bushels of corn, besides 23 other schooners with a capacity of 406,000 bushels that sometimes engage in grain carrying. At Milwaukee there are 32 grain vessels with an aggregate capacity of 961,000 bushels of wheat, and at other Lake Michigan ports seven vessels with a capacity of 181,000 bushels. These vessels are in the market for contracts to receive and hold grain through the winter and then take it down the lakes to Buffalo. Last week they were asking 7 cents per bushel for corn and 8 cents for wheat, but offers were a cent a bushel lower. The Chicago elevators will hold about 16,500,000 bushels, and there is about 10,000,000 in them. There is thus room to store only about 10,000,000 more in Chicago, which is equal only to a few weeks' receipts when the movement is active. Of the vessel capacity at Chicago, the 35 steam craft have capacity for 1,418,000 bushels, and the 94 schooners for 2,865,000—an average of 40,050 bushels for the former and 30,460 for the latter. The steam craft probably make about twice as many trips per season as the schooners. The average grain capacity per registered ton is nearly 56 bushels, which is a weight of 3,136 lbs., but it varies very greatly in different vessels, going as high as 78 bushels (4,368 lbs.) per ton in one of the schooners and as low as 20 bushels in one of the steam craft.

Traffic of the Upper Mississippi.

A telegram from St. Louis, dated Dec. 13, says: "There passed through the Keokuk Canal during the past season, 927 steamboats, 622 barges and 104 rafts, carrying 14,511 passengers, 79,262 tons of general merchandise, 2,500,000 bushels of grain, 133,000,000 feet of lumber, 16,000,000 feet of logs, 33,000,000 shingles and 31,000,000 laths. The canal is only used by river craft when they cannot cross the rapids by reason of low water. The above figures, therefore, show only a part of the Upper Mississippi River commerce with this port."

Lake and Canal Rates for the Season.

The Buffalo Commercial Advertiser says: "The navigation season now closing has been one of the most satisfactory to vessel owners for many years. In a few days the fleet on the way down will have reached port, and when the balances are struck we believe that the showing will be as good as that for any season since the close of the war. The rates have not averaged so high, to be sure, as in some preceding years; but, on the other hand, it must be remembered that vessels now in use are larger and more economical than their predecessors. In this connection the following statement of the average rate on wheat and corn from Chicago to Buffalo by lake, and the average on the same cereals from Buffalo to New York by canal, for the month of November, in the seasons named, will be of interest:

| Year. | —Lake.— | | —Canal.— | |
|-----------|---------------|--------------|---------------|--------------|
| | Wheat. Cents. | Corn. Cents. | Wheat. Cents. | Corn. Cents. |
| 1870..... | 8.5 | 7.8 | 11.9 | 11.5 |
| 1871..... | 10.1 | 9.7 | 15.9 | 14.1 |
| 1872..... | 12.4 | 11.4 | 16.0 | 14.0 |
| 1873..... | 7.4 | 6.9 | 12.3 | 10.6 |
| 1874..... | 4.6 | 4.2 | 9.7 | 8.7 |
| 1875..... | 5.0 | 5.6 | 10.5 | 9.1 |
| 1876..... | 3.7 | 3.3 | 7.5 | 6.9 |
| 1877..... | 4.5 | 3.9 | 10.0 | 8.7 |
| 1878..... | 4.3 | 4.1 | 5.6 | 5.7 |
| 1879..... | 7.0 | 6.5 | 10.2 | 8.8 |

"It will be observed that the average rate for November by lake has been larger than that for last month in only four seasons since 1870. The rate by canal is equally satisfactory, when the difference in the tolls is taken into the account."

"The reason for the advance in grain freights is not to be found in the increased movement of breadstuffs only. In former years other branches of trade, such as lumber, ore, etc., were so excessively dull that every vessel that would pass muster with the underwriters went to Milwaukee or Chicago for cereals. This caused an over-supply of grain tonnage and low freights. But, with the exception of a few weeks at the opening of the past season, the demand for vessels to carry lumber and ore was active, and consequently a large number of heavy carriers that had been engaged in the grain business were withdrawn and sent to Escanaba, Marquette and the Saginaw Valley. As we showed yesterday, the shipments of lumber and shingles from Michigan was greater than ever before."

"It is gratifying also to believe, as we do, that this improved condition of affairs is likely to continue through next season at least. The same influences that brought about the change will continue to act. The crops in Europe were a failure last season, and those in this country were abundant. The demand from Europe for breadstuffs and provisions must necessarily continue. The supply of ore in manufacturing districts is light in view of the increased demand for iron manufactures, while the stock of lumber at the East is inadequate to satisfy the demand. Then, too, the condition of the railways and of their business is such that it is not likely they will engage in any more ruinous freight wars for some time to come. On the whole, therefore, carriers by water have pretty good reason to feel satisfied."

RAILROAD LAW.

Right of Stockholders to Question a Consolidation.

In Dimpfel against the Ohio & Mississippi in the United States Circuit Court for the Northern District of Illinois, a stockholder sued on behalf of himself and such others as should come in, etc., to annul a consolidation contract and mortgage bond given under it. The Court applied the rule that consolidations are to be favored, and a general statute authority, though not presenting the mode, is enough, and that the corporation having received the benefit of the contract, and no objection having been interposed for four years, the stockholders could not, after the lapse of such a period, seek relief on the ground of *ultra vires*, especially as some of the bonds had passed into the hands of bona fide purchasers for value.

THE SCRAP HEAP.

Railroad Equipment Notes.

Contracts for box cars for the New York, Lake Erie & Western have been given out as follows: 1,000 to McKee & Fuller, Catsaquia, Pa.; 500 to the Lebanon Manufacturing Co., Lebanon, Pa.; 300 to F. Gardner & Co., Carlisle, Pa., and 400 to W. C. Allison & Co., Philadelphia.

The Peninsular Car Co. is a new organization formed to lease the Detroit Car Works and the Ford Forge in Hamtramck, a suburb of Detroit.

The Pittsburgh Steel Casting Co. has been making a large number of steel cross-heads for locomotives.

The Philadelphia and Reading shops at Reading, Pa., have just completed a fast passenger engine, and are building two new freight engines. All of them have the Wooten fire-box for burning coal dust.

The Northern Pacific shops at New Tacoma, Wash. Ter., are building 125 freight cars for the Pend d'Oreille Division.

Iron and Manufacturing Notes.

The Pittsburgh Bessemer Steel Co. has bought 50 acres of land on the Monongahela River, just above the Pittsburgh city farm. Contracts for machinery and building materials have been let.

Duquesne Forge in Pittsburgh is making some heavy forgings, including a five-ton steam-hammer head; a three-ton cross-head; a steel shaft, 12½ in. diameter; a steel crank shaft and a double steel crank for two lake vessels.

Stonewall Furnace, near Rome, Ga., will soon go into blast.

Round Mountain Furnace, on the Coosa River in Alabama, has gone into blast.

The American Bolt Co., at Lowell, Mass., is full of work, with orders for two months ahead.

Mr. Covington Westlake, of Youngstown, O., has bought the rolling mill at Warren, O., and has already begun to repair the mill and rebuild part of it which was burned last year.

The Union Iron Works of Prescott, Scott & Co., at Carson, Nev., are manufacturing the Gowan chilled car-wheel grinding machines for the company, to fill orders on the Pacific coast.

Bridge Notes.

The Kellogg Bridge Co., of Buffalo, N. Y., has an order for five spans for the Pittsburgh, Cincinnati & St. Louis road.

The contract for the new 312 ft. span of the St. Charles Bridge, to replace the one which recently fell, has been let to Mr. C. Shaler Smith, under whose direction the bridge was first built. The work will be done by the Edgemoor Iron Company at Wilmington, Del. The failure of this span a few months ago is attributed to a derailed car.

Prices of Rails.

Steel rails are steady and unchanged, with business light and a tendency to higher prices. Quotations \$65 to \$70 per ton at mill.

Iron rails are steady, and many small orders are being placed at \$53 to \$55 per ton at mill. An especially active demand for light rails is noted.

Old iron rails are active, with some large sales reported. Philadelphia quotations are \$32.50 to \$33 per ton. Several thousand tons are reported sold at these figures for spring delivery.

Smoke.

An engine driver on an English railway was recently arrested and fined "for causing a nuisance by permitting smoke to issue from the funnel of his engine." Imagine a law against smoking engines in this country and imagine an attempt to enforce it!

Out at a station on the Western North Carolina road the other day, a granger from the mountains called at the ticket window for tickets for a "grown-up 'oman and a yearling-size gal."

If you will notice, you will find that a lady, on entering a railroad car, will almost invariably take her seat beside another lady, when possible. A gentleman is very likely to make the same choice, which shows that the tastes of the two sexes are not so dissimilar as a casual observer might be led to suspect.—*Boston Transcript*.

There is only one thing which could render the average railway waiting-room more attractive than it is, and that is the pair of boots worn by the last switchman who was ground up.—*Detroit Free Press*.

The mixture of politics and transportation has been heard of before, but they have in Maryland now the first case on record where it was necessary to get a receiver appointed for a company in order to prevent the election of its President to the United States Senate.

Out in Detroit they know why Mr. Vanderbilt sold his stock. At least the *Free Press* says that it is fully explained by the fact that he is going to build a new house, and wants all the money he can raise to pay the plumber's bills.

This explanation probably comes as near the truth as some of those given nearer New York.

Iron, Grain and Coal Barges.

Within the past few months St. Louis parties have been making repeated inquiries of Pittsburgh firms in regard to the manufacture of iron barges for the transportation of grain from that city to New Orleans. Those particularly interested in this matter attach a good deal of importance to these inquiries. They are inclined to believe that Jay Gould's recently acquired railroad interests are at the bottom of the project, and that a large proportion of the grain brought to St. Louis is to find its way to Europe by way of the Gulf. They further incline to the belief that Capt. Eads' present absence across the ocean is significant. It is argued that the Captain is enlisting the interest of English capitalists in the erection of great grain elevators at Port Eads, where the largest vessels could obtain their cargoes of wheat and corn.

Whatever influences may be at work, the Fort Pitt Boiler Works of this city have been applied to for figures on an indefinite number of iron barges suited to the transportation

of grain, as stated. No definite inquiry for proposals to build have been received as yet, but matters tend that way.

Meanwhile, the establishment named will begin the construction of a pair of experimental iron barges for coal transportation, and constructed under patents recently secured by Mr. R. G. Jones, one of the firm. These barges will be respectively 130 and 140 feet in length by 25 feet beam and 7½ feet hold. The plates will be ¼ or ⅓ thick and the patent named covers the use of wood to a limited extent. Wooden sill timbers and bottom planks form part of the craft, and to render the joints water-tight, rubber gaskets will be interposed between the angle iron and the sill. River men regard this project with a good deal of interest. The cost of the iron barge at present prices of the metal, and as compared with the cost of wood, is nearly double, but the advantages claimed in the way of increased duration, strength and impregnability to snags, etc., will, it is thought, counterbalance the increased first cost of the barges.—*Pittsburgh Telegraph*.

Survivors of the Jackson Disaster.

A dispatch from Jackson, Mich., Dec. 10, to the Detroit Post and Tribune says:

"The presentation ceremonies by the survivors of the railroad disaster at the Hurd House, this evening, passed off successfully. After music, Hon. G. T. Gridley read letters from H. B. Ledyard; and also from Mrs. Thomas Clement, of Lockport, N. Y., J. F. Pennell, St. Paul, Minn., and other sufferers, and letters of regret from Ex-Governor Blair and others who were invited but could not attend. After more music, Judge Gridley read the presentation speech, which was written by John Jeffreys, of New Jersey, one of the sufferers, and was a glowing tribute to the Michigan Central Railroad Company, the hotel keepers, Smith & Hurd, and all the citizens of Jackson, at whose hands the sufferers acknowledged such kind and considerate treatment. The response was made by Frank L. Smith, of the Hurd House, but finding himself inadequate to the occasion, he called on W. K. Gibson, Attorney of the Central road to finish for him, and Mr. Gibson made a most feeling and appropriate response, referring not only to the pleasure of the hotel proprietors and the railroad officials in caring for the wounded, but also to their deep felt sorrow in the afflictions of those who had lost their friends and relatives in the sad disaster. Selections of music followed by Messrs. Hunt, Lombard, Mintee, Chamberlin, Laundry and Western of Jackson, solos on the guitar and harmonicon by James M. Lothrop of Detroit, and pieces by Prof. Beck's orchestra. The exercises closed with the doxology by the choir and benediction by the Rev. Dr. Hough."

"During the ceremonies little Will Rice, the four-year-old boy whose mother, father and sister were killed, and who narrowly escaped being crushed to pieces himself, was carried into the hall by Dr. J. W. North, surgeon of the road, and was received with deafening cheers."

"The spacious dining-room of the Hurd House was full, about 300 being present, and it was a most happy occasion, although in memory of a sad event. The resolutions, engrossed, framed and decorated by Messrs. Frost, Kerr and Sammons of this city respectively, form a handsome memorial of the occasion."

OLD AND NEW ROADS.

Atchison & Nebraska.—The extension of this road northwest is now completed to Ulysses, Neb., 12½ miles beyond the late terminus at Seward, and 188½ miles from Atchison. Work is being pushed toward Columbus.

Atchison, Topeka & Santa Fe.—The Boston Advertiser says: "A proposition is pending for a consolidation of the Pueblo & Arkansas Valley Railroad with the Atchison, Topeka & Santa Fe Railroad, upon the basis of three shares of the former for two of the latter. The proposition will shortly come before the directors of the two roads officially. As yet nothing definite has been done. The Atchison has this year taken in the Kansas City, Topeka & Western Railroad."

Atchison, St. Joseph & Northern.—This company has filed articles of incorporation for a railroad, which is to commence at Atchison, Kan., and run through Doniphan County to the St. Joseph & Western Railroad, and over said line into St. Joseph, and also unite with the St. Joseph & Topeka Railroad, with power to extend said railroad northwardly and westwardly from the St. Joseph & Western Railroad toward and to the northern boundary of the state of Kansas and thence into the county of Douglas, Neb.

Atlantic & Great Western.—A meeting of bond and stockholders was held in London Dec. 4 at the call of the Reconstruction Trustees, at which Mr. C. E. Lewis, M. P., made a speech, in which he said that the project for leasing the road to the Erie was given up "because the Trustees could not succeed in carrying some of the requirements they thought to be essential for your safety as owners of this property. It was not because we were afraid, but because we felt we had not sufficient support from the outside, or from you, that we abstained from pursuing the policy which we then commenced. We paid a deference, as we were bound to do, to that substantial minority of opinion with which we did not agree, and when we came to put our hand to paper, and endeavor to put on paper an agreement between us, of course we were strict because we felt we had the interest of a minority to protect, and it broke down for that reason; and I am here to announce to-day that in all we have done, and in all I am going to announce to you, in our present position we are under no fetters, either legal or otherwise—no understanding, no agreement, open or covert, in any way binding us or pledging us as to the future with any other company." Mr. Lewis gave a sketch of the operations of the Trustees this year. In July they called 250 of the largest bondholders together to endeavor to raise the money necessary for reorganization. They were told that their holding of first, second and third mortgage bonds, which were worth £1,750,000, would not realize £200,000 unless the money could be raised for the reorganization. There was the Receiver's debt of £250,000 or more, the Ohio mortgage, amounting to £500,000 to £600,000, and other costs. But the bondholders would not subscribe a penny. They did, however, give the trustees *carte blanche* as to borrowing. Moreover, there were two litigants in America claiming great sums who said the Atlantic & Great Western should never raise a penny until it had settled with them; they were suing for £600,000 or £700,000, which they claimed to rank above the first mortgage. It being known that the bondholders refused to lend the company anything, and that these claims were pending, it would be impossible to borrow the £2,000,000 needed. Now under these circumstances the Trustees settled the two suits by undertaking that the reorganized company should give the two litigants first mortgage bonds which at the price then ruling were worth £180,000, upon the condition that these very parties should guarantee the first half million of the £2,000,000 required for reorganization. Mr. Lewis said he believed that the railway company was right in both the suits and would have gained them eventually; but it could not wait, and if the money

had not been raised the first mortgage bonds would have realized only from 6 to 10 per cent. of their face. Then the first loan of \$500,000 was issued in August last. It was offered to the bondholders first at 90, but they made slight responses; but this arrangement guaranteed that it should be taken up. When the speaker addressed them this loan was at a premium. Then a trustee went to New York and applied to several financial houses, which sent experts over the line, who reported that if \$10,000,000 was raised instead of \$8,000,000, and the extra \$2,000,000 expended on improvements, the loan would be secure; but they would not loan anything unless \$10,000,000 was raised. To raise the additional \$2,000,000, the trustees had determined not to increase the \$8,000,000 prior lien, but to issue \$4,500,000 additional first-mortgage bonds, which rank next below the prior lien. These will be offered to the holders of first, second and third mortgage bonds in the proportion of \$250 to every \$3,000 of their holdings of any class. If the bondholders did not take them, their sale was assured. The name of the new company would be the "New York, Pennsylvania & Ohio." In answer to questions Mr. Lewis said that from the proceeds of the prior lien, the Ohio mortgage would be paid off and equipment purchased; that the suit with the United States Rolling Stock Company was not concluded; but that the result would not affect the reorganization; that the trustees had not borrowed money of Bischoffsheim & Goldschmidt; that the reorganization proposed that the bondholders should vote for the trustees who would nominate the board of directors of the new company. He announced the receipt of a telegram from Amsterdam saying that the subscription for the residue of \$5,500,000 prior lien bonds was more than assured that day.

The meeting voted unanimously to ratify the proceedings of the Trustees and to authorize them to take any further steps necessary to complete this reorganization.

Central & Montgomery.—This road is now completed to Montgomery, Tex., 13 miles eastward from the late terminus at Plantersville, and 25 miles from the junction with the Houston & Texas Central at Navasota. The completion of the road was duly celebrated by an excursion and barbecue.

Chesapeake & Ohio Canal.—A dispatch from Baltimore, Dec. 14, says: "Within a week a petition will be entered before Judge Bond, of the United States Court for this district, asking the appointment of a receiver for the Chesapeake & Ohio Canal. The petition is being signed by holders of first preferred bonds to the amount of \$1,700,000. They have received no interest since 1876 and charge that, under the management of A. P. Gorman, President of the company, the canal has been run as a political engine, unnecessary officers having been appointed at absurdly large salaries, instead of as a business enterprise. They also deny the power of the state to authorize the issue of repair bonds as a lien on the canal itself, while first preferred bonds are only a lien on the tolls and revenues of the canal. The case is brought into the United States Court, as some bondholders do not live in Maryland, and the petition will be acted on before January."

Chicago, Rock Island & Pacific.—The following statement is published for the half-year from April 1 to Sept. 30:

| | |
|-----------------------------|-------------|
| Gross earnings | \$5,067,915 |
| Expenses (53.08 per cent.) | 2,720,828 |
| Net earnings | \$2,347,087 |
| Interest, rentals, etc. | \$508,000 |
| Dividends, May 1 and Aug. 1 | 1,048,995 |
| | 1,647,655 |

Surplus for the half-year.....\$600,632
The dividends were 2 per cent. each, 4 per cent. in all, with an additional 1 per cent. from Iowa Southern & Missouri Northern stock held in trust, making 5 per cent. for the half-year.

Chicago & Strawn.—On this road, which, with the Chicago & Paducah, is to be the Wabash, St. Louis & Pacific line to Chicago, track is laid from Strawn, Ill., north by east 34 miles. Work is progressing steadily.

Columbus, Chicago & Indiana Central.—At a meeting of the bondholders in New York, Dec. 13, the committee having in charge the question of reducing the indebtedness of the company in accordance with Judge Harlan's decision, submitted the following report: "Your committee decided that it would greatly strengthen the position of the consolidated bonds to reduce that portion of the excess of indebtedness not represented by second-mortgage bonds, with the underlying bonds, so far as could be done, and, having secured the necessary funds to carry out this programme, they have taken the engagement to pay off the \$665,500 Indiana Central 10 per cent. bonds, and have besides purchased within \$217,814 of the necessary amount of other underlying bonds to complete the reduction of that part of the excess of debt not represented by the second-mortgage bonds. The interest on the bonds already in the hands of the committee, and on those they have funds to pay off, amounts to \$119,578 per annum. By the cancellation of these securities the interest on the bonds having precedence over the consolidated bonds will be permanently reduced to \$389,257 per annum. We intend to make further purchases of underlying bonds should we be able to do so at underlying prices. A portion of those already purchased have been paid for in Union Trust Company's receipts for consolidated bonds deposited under the bondholders' agreement. Taking these at their present market value (87), the average cost of the purchases made is 90%, exclusive of the Indiana Central 10 per cent. bonds, of which \$160,500 were purchased at 1 per cent. premium and accrued interest, and the remainder will be paid for at par. The purchase of a portion of the Indiana Central 10 per cent. bonds was made with the intention of re-issuing them as 7 per cent. bonds; but our counsel thought it doubtful whether this could be legally done; so we abandoned the idea of doing so, and concluded to cancel the whole issue. The present liabilities of the committee amount to about \$1,200,000. In this amount is included the 10 per cent. paid to the second-mortgage bondholders, and what has been paid for underlying coupons (about \$375,000) and \$25,000 legal and other expenses. There is still to pay, on or before Dec. 31, \$521,300, principal and interest of the outstanding Indiana Central 10 per cent. bonds, and there may be other liabilities for right of way, etc., to liquidate in order to reduce the absolute indebtedness of the Columbus, Chicago & Indiana Central Railway Company to \$15,831,000. On the other hand there is now in the hands of the receivers \$68,237 for net receipts of August, and on Jan. 1 they will receive for net receipts of September, \$150,258; together, \$218,495. Of this amount about \$185,000 will be applicable to the reimbursement of the coupons already paid for by your committee. A portion of the issue of \$10,000,000 convertible bonds secured by mortgage dated Feb. 1, 1870, and entitled to 7 per cent. accumulated interest when earned, was set aside for the purpose of being exchanged against the bonds in excess of the \$15,831,000, to which the absolute indebtedness of the company was to be reduced,

and your committee is entitled to an amount of these bonds to set aside equal to the amount of bonds they cancel of the previous issues. They will thus have as an asset about \$1,400,000 of these bonds. Your committee have agreed to repay before the end of the year a portion at least of the liabilities they have incurred, and in order to enable them to do so they propose to sell to the highest bidder \$750,000 convertible bonds, and \$1,500,000 Union Trust Company's receipts obtained in exchange for consolidated bonds redeposited in accordance with the terms of the agreement of Aug. 22, 1879."

Messrs. B. L. Laddington, Henry Morgan and C. F. Woerisch were appointed a committee to audit the accounts of the bondholders' committee.

Notice is given that the Trustees and Receivers will pay, on presentation at the office of A. Iselin & Co., No. 48 Wall street, New York, the coupons due July 1, 1879, on the following bonds: Columbus & Indianapolis preferred first, common first and second-mortgage bonds; Columbus & Indianapolis Central first-mortgage bonds.

Detroit, Hillsdale & Southwestern.—The stockholders are to vote at the annual meeting next month on the question of issuing bonds to be secured by a mortgage for \$750,000 on the road. It was formerly the Detroit, Hillsdale & Indiana, and passed to the present company through foreclosure; there is now no bonded debt on the road.

East Tennessee, Virginia & Georgia.—At the annual convention in Knoxville, Dec. 5, a resolution was passed authorizing the board to adopt either one of three plans submitted for raising \$1,042,000 needed to pay off various issues of bonds which will mature in the next five years. Of this amount \$237,000 East Tennessee & Georgia bonds will fall due in July, 1880.

The stockholders also voted to approve the changes recommended in the lease of the Memphis & Charleston road.

A resolution was presented and adopted changing the time of holding the stockholders' convention from the second Wednesday in October till the second Wednesday in November, each year; also conferring upon the President the power to postpone the meeting by giving 60 days' notice.

It was voted also to adjourn the convention, not *sine die*, as usual, but to meet at the call of the President.

Geneva, Hornellsville & Pine Creek.—This company has voted to ratify the agreement of consolidation with the Ontario Southern. The company has no completed road, but has done some work on a line from Hornellsville, N. Y., to Geneva. The Ontario Southern owns a line from Sodas Point, N. Y., southward to Stanley, 84 miles.

Georgia Western.—It is announced that the Louisville & Nashville Company has bought the property of this company, consisting of a graded road-bed running some 25 miles westward from Atlanta, Ga., and the franchise, right of way, etc., for a line from Atlanta west about 160 miles to a point on the South & North Alabama north of Birmingham. The purchase is supposed to indicate the intention of the Louisville & Nashville to build from Decatur or some other point on the South & North road to Atlanta, which would make it independent of the Nashville, Chattanooga & St. Louis.

Great Western of Canada.—On the return of the President and two directors from America, where they had been negotiating with Mr. Vanderbilt, the directors issued the following special report to the shareholders:

"At the *pro forma* meeting of shareholders held on Oct. 23, 1879, the accounts for the past half-year to July 31, and the directors' report, were submitted, but their adoption was not moved, and the business was, in accordance with the notice convening the meeting, adjourned to admit of their full consideration after the return from America of the President and two other members of the board. In the course of the limited discussion which then took place, it was announced that, inasmuch as the proxies in favor of the board had of necessity been given in ignorance of any special action the deputation might be taking in America, a special meeting should be convened to follow immediately the adjourned ordinary meeting, called for Dec. 11, and thus enable the proprietors to become acquainted with any such special action, and to express their opinion generally on the policy of the board. A proxy paper, therefore, accompanies this report. It will be in the memory of the shareholders that Colonel Grey and Mr. Bald went on a special mission to America in May last, with the object of improving the company's relations with neighboring railways, and, where desirable, of extending its connections. Negotiations in this spirit were commenced, and progressed satisfactorily, but an agitation of amalgamation with the Grand Trunk Company having arisen, they were necessarily suspended to take the proprietors' opinion on the proposed fusion, which, if accepted, would, of course, have terminated the negotiations. The proprietors having decided against the proposal of the Grand Trunk Company, the deputation, accompanied by Mr. Mansel (who had been elected to fill the vacancy caused by the retirement of Mr. Childers), returned to America to give effect to arrangements already provisionally made, and if deemed expedient, to negotiate more permanent agreements with connecting companies, based on proposals from Mr. Vanderbilt, by whom several of them are represented. A connection with the vast system of the Wabash Company, separated from the Great Western by a distance of only 65 miles, being obviously desirable, arrangements have been made with that company for interchange of traffic, and to bridge, if necessary, the intervening space by the joint construction of a connecting line of railway; the necessity, however, for submitting the agreement for ratification by the proprietors has fortunately not arisen, facilities having been granted by means of one of the two existing roads between Detroit and Toledo. Further action on another provisional agreement entered into with the Rome, Watertown & Ogdensburg Company, to improve the existing connection with that line by the joint construction of a bridge at Lewiston, is also rendered for the present unnecessary, under an engagement for increased facilities by an existing branch of the New York Central Railway Company. As regards the suggested more permanent relations with the Canada Southern Company, it was found in the course of negotiations that the requirements for an agreement extending over a long term were such as could not be recommended by your directors, who consequently elected not to disturb the existing traffic arrangement. The general policy of the board may thus tersely be expressed: 1. To maintain the company's property in the highest state of efficiency at a minimum cost. 2. To develop to the fullest extent the local business of the road. 3. By cooperation with the company's eastern and western connections to obtain, at remunerative rates, a fair proportion of the traffic passing, or which may be induced to pass, through Canada. In pursuance of this policy the working expenses have, by strict attention to detail on the part of the general manager and staff, been materially reduced, while the road, rolling stock and plant generally have not only been upheld but improved in efficiency, and compare favorably with any other system of railway. With a view to further economy the board have made every effort to minimize the effects of competition by arrange-

ments with the company's competitors, pooling agreements having been made where practicable. With respect to the development of local traffic, the board have endeavored to meet, and even anticipate, the requirements of the territory served by the company's system. While, however, recognizing the value of the local business, they discourage any unproductive expenditure on branch lines. An examination of the capital account during the administration of the present board shows that the expenditure under this head during the last five years, excluding the necessary provision for prior liabilities, has been extremely small. The endeavor of the board has been to strengthen existing relations with other companies, and where practicable, and expedient in the interests of the company, to extend them. Acting on these lines, the board did not hesitate to recommend the acquisition of the Detroit & Milwaukee Railway, a course which the results have already more than justified, the net receipts of the ten months to October 31st being estimated to leave a considerable surplus, after providing for the twelve months' interest payable on the bonds of that company. On the same principle the connection above reported with the Wabash Company has been formed, from which the board have every reason to anticipate the best results. The revenue for the current half-year, as shown by the published traffic returns, is most encouraging. This is due partly to the improvement of trade in the United States, which for several years has been injuriously affected by abnormal causes, and partly to the advance and maintenance of rates brought about by a better understanding amongst the competing roads, to which the Great Western have contributed their influence. The directors feel satisfied that a continuance of this policy will tend to prevent a recurrence of the unprofitable results of the last few years, and they confidently look for the support of the proprietors to enable them to carry it out."

A dispatch from London, Dec. 11, says: "At the meeting of shareholders of this company to-day, Col. Grey, President of the company, denied the statement recently published, that in view of the company's refusal of the proposition for amalgamation with the Grand Trunk Railway, a deputation of shareholders had endeavored to arrange for amalgamation with some other company. He said that whenever the Grand Trunk Railway Company was ready to discuss a plan for more harmonious working the Great Western Company would be quite ready to meet them. A resolution proposed by the amalgamation party, for the appointment of a committee of shareholders to negotiate with the board of directors of the Grand Trunk and Great Western companies, was withdrawn, in consequence of Colonel Grey declaring that if the Grand Trunk was prepared to propose any terms, the directors of the Great Western were willing to accept Mr. Forbes as arbitrator in all matters between the two companies."

Greeley, Ft. Collins & Pacific.—This company has been organized to build a railroad from Greeley, Col., to the eastern line of the state, to connect with the proposed extension of the Burlington & Missouri River in Nebraska. It is said to be organized in the interest of that company.

Hudson Tunnel Railroad.—Notice is given that this company will make application to the New Jersey Legislature for an extension of the time allowed for completion of the road; also for an act to allow the company to lease or sell its road and tunnel, or to consolidate with any other company which may make connection with the tunnel so as to form a continuous line.

Illinois Central.—The extension of the Chatsworth Division is now completed to the Chicago & Paducah crossing at Strawn, Ill., 17 miles southwest from the former terminus at Chatsworth, and 59 miles from Kankakee. Work is progressing toward Bloomington.

Kansas City & Eastern.—It is reported that this road has been sold to Jay Gould, and that it will be changed to standard gauge and worked as a branch of the Missouri Pacific. It is now of 3 feet gauge, and extends from Kansas City to Lexington, 42 miles. It has considerable local traffic, including that of some coal mines on the line. With the gauge changed and a connection made with the Lexington Branch of the Missouri Pacific, it would make a loop line from Sedalia to Kansas City.

Kansas Pacific.—The foreclosure sale under the second land-grant mortgage has been set aside by consent of all parties, on the ground that the purchase price was inadequate. The sale conveyed title to certain lands covered by the mortgage, and they were bought in by the trustees. A new sale will now be had.

Lake Erie & Western.—The consolidation of this company and the LaFayette, Bloomington & Muncie has been ratified by the stockholders of both companies, the income bondholders having withdrawn their objections. The new Lake Erie & Western stock will be issued in a few days, four shares of it being given for each share of LaFayette, Bloomington & Muncie.

Lake Shore & Michigan Southern.—At a meeting of the board held in New York, Dec. 16, the following statement was presented for 1879, December partial estimated:

| | 1879. | 1878. | Inc. or Dec. | P. c. |
|-------------------------------------|--------------|--------------|--------------|-----------------|
| Passengers..... | \$3,128,460 | \$3,057,393 | L. | \$71,067 2.3 |
| Freight..... | 11,279,503 | 10,048,932 | L. | 1,230,561 12.2 |
| Other sources..... | 767,057 | 679,421 | D. | 87,636 12.9 |
| Total..... | \$15,175,020 | \$13,979,706 | L. | \$1,195,314 8.5 |
| Expenses..... | 8,895,000 | 8,486,801 | L. | 408,199 4.8 |
| Net earnings..... | \$6,280,000 | \$5,493,105 | L. | \$786,895 14.3 |
| Interest, rentals, guarant'd stock. | 2,723,000 | 2,718,791 | L. | 4,209 0.2 |
| Net surplus..... | \$3,557,000 | \$2,774,374 | L. | \$782,626 28.2 |
| Percent of exps..... | 58.62 | 60.70 | D. | 2.08 3.4 |

The net surplus is equivalent to 7.19 per cent. on the stock.

On this showing it was resolved to declare a dividend of 4 per cent. for the last half-year, making 6½ per cent. for the year. This will make the income account as follows:

| | |
|--|-------------|
| Net surplus..... | \$3,557,000 |
| Sinking fund..... | \$230,000 |
| Ashtabula accident claims..... | 58,973 |
| August dividend, 2½ per cent..... | 1,206,082 |
| Dividend now declared, 4 per cent..... | 1,978,000 |
| | 3,523,005 |

Balance unexpended.....\$33,005
Nothing has been charged to construction or equipment accounts during the year. Many items heretofore usually charged to these accounts have this year been included in operating expenses, among which are new cars, to the amount of \$150,000, and improvements of Ashtabula Harbor, Jan. 1, etc., to the amount of \$100,000, making an aggregate of about \$250,000. Also, included in operating expenses, the cost of 9,500 tons of steel rails in excess of iron. The number of miles of steel rails now laid is 1,100. The road and equipment have been maintained in the highest condition. With one unimportant exception all Ashtabula accident claims are now settled.

Little Rock, Mississippi River & Texas.—This com-

pany has let the contract for the extension of its road from Pine Bluff, Ark., north by west to Little Rock, 40 miles, to Col. Zeb. Ward, lessee of the Arkansas penitentiary. Work is to be begun at once, the grading to be finished by April 1, and the whole road by July 1, 1880.

Louisville, New Albany & Chicago.—The Louisville Post and News says: The Louisville & Nashville has not gained control of the Louisville, New Albany & Chicago road, but citizens of Louisville who will work in conjunction with our great Southern road have done so. Dr. Standford and Messrs. Isaac C. Caldwell and R. S. Veech, of this city, and Robert Lennox Kennedy, H. F. Vail, John J. Astor, William Astor, Isaac Sloan, and others, of New York, have secured a controlling amount of the \$5,000,000 of stock in the road, and will manage it at once as a feeder to the trade of Louisville and the business of the Louisville & Nashville & Great Southern railroad.

"The road is 288 miles long, extending from Louisville via the bridge to Michigan City, Ind., on Lake Michigan. It has no bonded indebtedness. Heretofore the business of the road has been conducted in the interest of LaFayette, Ind., the discriminations in favor of that little city against Louisville, New Albany and Chicago having been most oppressive. In consequence, although the line has long been a through route from Louisville to Chicago, it has been merely local in its operations."

"There are 13 directors of the road, of whom probably 6 will be selected at the next election from Louisville, and the rest from Indiana and New York. Mr. R. S. Veech will probably be made President."

Mackinaw & Marquette.—The Detroit, Marquette & Mackinac Company, which has undertaken to build this road, has let the contract for the first section of 20 miles from Marquette to McDermid & Hendrie, of Detroit, for \$118,806, work to be begun at once.

The company has, it is stated, secured about \$1,000,000 in subscriptions in Detroit, and double that amount from New York parties, thus insuring its ability to build the road. The surveys will be completed this winter, so that work can go on from both ends of the line in the spring.

Memphis & Little Rock.—A dispatch from Little Rock, Ark., Dec. 18, says: "Chancellor Carroll, of the Pulaski Chancery Court, to-day decided the case of the State against the Memphis & Little Rock Railroad Company et al. The suit was for the foreclosure of the mortgage to secure a loan of \$100,000 made in 1861. The decree is for the state, and orders the sale of the road, rolling stock, etc., unless the debt and interest, amounting to over \$202,000, is paid by a day named. The case will probably be appealed."

Michigan Central.—At a meeting of the board in New York, Dec. 16, the following statement for the year was presented, December partly estimated:

| | 1879. | 1878. | Inc. or Dec. | P. c. |
|----------------------------|-------------|-------------|----------------|-------|
| Gross earnings..... | \$7,345,700 | \$6,001,700 | I. \$1,344,000 | 5.1 |
| Expenses..... | 4,624,000 | 4,367,300 | I. 256,700 | 5.9 |
| Net earnings..... | \$2,721,700 | \$1,634,400 | I. \$1,087,300 | 3.7 |
| Interest and rentals..... | 1,620,000 | 1,049,900 | D. 570,100 | 1.8 |
| Net surplus..... | \$1,101,700 | \$584,500 | I. \$517,200 | 13.0 |
| Per cent. of expenses..... | 62.96 | 62.46 | I. 0.50 | 0.8 |

The net surplus is equivalent to 5.87 per cent. on the stock. On this statement it was resolved to declare a dividend of 4 per cent., with the 1½ per cent. paid in August will make 5½ per cent. for the year. The income account will stand as follows:

| | |
|--|-------------|
| Net surplus..... | \$1,101,700 |
| Dividend, 4 per cent., Aug. 1..... | \$10,000 |
| Dividend now declared, 4 per cent..... | 740,500 |
| | 1,040,500 |

Balance..... \$60,500

The only charge to construction during the year was \$10,000 for land. Included in operating expenses are the following items: \$50,000 for new and additional cars, the cost of 5,000 tons steel rails in excess of value of iron, and renewals in iron of wooden bridges, at a cost of about \$50,000.

It is said that work will be begun in the spring on the extension of the Jackson, Lansing & Saginaw Division to the Straits of Mackinaw.

Notice is given that 50 Jackson, Lansing & Saginaw mortgage bonds have been drawn for redemption under the terms of the mortgage, and will be paid Jan. 3, at the Atlantic National Bank, Boston, or the Farmers' Loan & Trust Company, New York. Interest on them will cease from that date. The numbers of the bonds drawn are: 34, 49, 52, 58, 12, 139, 124, 219, 280, 291, 292, 300, 317, 319, 321, 322, 324, 340, 362, 371, 379, 388, 444, 447, 496, 497, 499, 545, 579, 580, 596, 578, 579, 582, 601, 613, 626, 636, 645, 668, 674, 676, 692, 714, 716, 761, 869, 893, 900 and 924.

Milwaukee, Lake Shore & Western.—This road is now completed to Tigerton, Wis., 19 miles beyond the late terminus at Clintonville, and 176 miles from Milwaukee. Regular trains began to run to the new terminus Dec. 8. The stations on the new line, with the distances from Milwaukee, are: Buckbee, 161 miles; Marion, 164; Huntington, 169; Split Rock, 173; Tigerton, 176.

Missouri, Kansas & Texas.—The Union Trust Company has issued a circular embodying a plan for acquiring and extending the Denton & Pacific and Denton & South-eastern roads in Texas, which is in substance as follows:

Parties furnishing funds for new roads, to subscribe the amounts set opposite their names, and receive one bond of \$1,000, and one share of \$100, for each \$1,000 subscribed, the bonds to be delivered to them, the stock to be placed with the Union Trust Company upon the conditions mentioned below.

Bonds to be issued for actual cost of roads, bearing 10 per cent. interest, payable half-yearly, secured by first mortgage upon the roads to the Union Trust Company of New York, trustee, and subscribed for by stockholders at 90 per cent., the interest to be payable half-yearly; but if funds are insufficient to meet full interest, a partial payment may be made, and if such partial payments amount to 7 per cent. in any one year there shall be no foreclosure for the balance, but it shall remain due and be paid out of first earnings of succeeding years applicable thereto, prior to any application of sinking fund.

Interest at the rate of 10 per cent. per annum upon funds subscribed to be allowed from date of actual payment, and if deemed advisable such interest may be treated as part of cost of construction of roads.

Stock representing one-tenth of cost of roads to be issued to stockholders at par, and deposited with the Trust Company, with irrevocable power of attorney for transfer to itself as trustee of the Missouri, Kansas & Texas Railway mortgages in certificates of one share of \$100 each, each certificate numbered to correspond with a bond of \$1,000. Such certificates shall remain in the hands of the trustees, to be transferred as herein provided for the benefit of the bondholders of Missouri, Kansas & Texas Railway, unless the trustees shall be unable to pay interest to the extent of 7 per cent. per annum in any one

year upon the bonds issued upon the new roads. If the total amount of interest paid in any one year shall be less than 7 per cent., and said default shall continue for three months thereafter, it shall, at the expiration of such three months, be the duty of the trustees to deliver forthwith to each bondholder, upon the presentation of his bonds for verification, the certificates of stock corresponding in number thereto.

An agreement to be drawn up between the Trust Company and new railroad companies, whereby the roads are to be operated by the Trust Company as trustees in possession, charging such rates as may be deemed proper. A rebate of 85 is also to be allowed on increase of business to the Missouri, Kansas & Texas from the new roads. The funds so derived to be applied so far as they will admit:

First—To payment of interest at 10 per cent. per annum upon the bonds.

Second—An amount equal to 10 per cent. upon total amount of bonds to be applied in retiring the bonds at 110 per cent., such bonds to be designated by lot, provided the trustees shall be unable, after proper advertisement, to invest the amount in the bonds by purchase at a lower rate; bonds purchased or redeemed to be canceled, and the amount of bonds secured by the mortgage reduced to that extent. For every bond canceled, one share of stock to be transferred by the Trust Company to itself as trustee of the Missouri, Kansas & Texas Railway mortgages. When all the bonds are retired and canceled, the Trust Company to hold said stock for benefit of the Missouri, Kansas & Texas first and second mortgage bondholders, keeping alive the organization of the new railways, or cause the stock to be canceled and the property to be deeded to the Missouri, Kansas & Texas Railway, subject to the first and second mortgages, as it may be advised by best protect and preserve the security of the Missouri, Kansas & Texas bondholders; it being the intention that the new railways shall, when free from debt, be added to the security underlying the first and second mortgages upon the Missouri, Kansas & Texas Railway, and form a portion of that road, subject to its mortgage debt.

Third—Any balance of income at the end of the fiscal year, over and above the amounts required to comply with articles 1 and 2, to be re-credited to the general income of the Missouri, Kansas & Texas Railway, and applied by the trustee as part of the income of the main line for the benefit of the Missouri, Kansas & Texas bondholders.

The present organization of the two companies to be kept up or a new company formed, as may be deemed best. All expenditures to be under control of an advisory committee of seven members, consisting of three from the new companies, one from the board of directors of the Missouri, Kansas & Texas Railway Company, one from the advisory board and two from the Trust Company.

The existing debts of the two companies are to be retired and all funds subscribed in excess of the amount required to be used for the extension of the road. The trustee to have power to make arrangements for local aid and to supervise all construction.

Missouri Pacific.—It is stated that Col. J. L. Stephens, who owns the branch of this road from Tipton, Mo., to Boonville, 25 miles, has sold it to the company for \$250,000 guaranteed 6 per cent. bonds.

New Haven & Derby.—This company, after a long controversy, has at last concluded an agreement with the Naugatuck Railroad Company for exchange of freight business, and of cars. Heretofore all freight has had to be transferred at the junction, and the exchange has been limited as much as possible.

New Jersey Midland.—The securities of this company have lately risen in price on reports that certain parties were buying up the bonds with a view to securing control of the road and making it part of a through line in connection with the New York & Oswego Midland. Several versions of the rumor have been in circulation, most of them manifestly improbable, but it seems pretty sure that someone has been buying up the bonds.

New York, Lake Erie & Western.—On the section of single track still remaining between Linden, N. Y., and Burns on the main line, work is now in progress on the grading for the second track. At several points on this section the second track will really be a distinct road, loops or cross-cuts being made which will avoid some of the heavier grades on the old line. It is expected that most of the grading will be done in another month.

New York & Greenwood Lake.—It is reported that arrangements are being made to build the extension of this road from the present terminus at Greenwood Lake, N. J., to Middletown, N. Y. The distance is about 20 miles through a rough and difficult country. This extension would make the road available as a loop line for the Erie, or as a New York connection for the New York & Oswego Midland.

New York & Manhattan Beach.—This company has voted to issue \$900,000 preferred stock, \$200,000 to be used to fund the existing debt of the company and the balance to be held as fund to pay for improvements or new equipment.

Pennsylvania Railroad in Maryland.—This road was opened for traffic Dec. 15, and regular trains are now running. It will be worked in connection with the Bedford Division of the Pennsylvania Railroad, and extends that road from the Maryland line to the town of Cumberland.

Peoria, Decatur & Evansville.—The following circular is dated Dec. 8:

"The Pekin, Lincoln & Decatur Railway Company and the Decatur, Mattoon & Southern Railroad Company have this day been consolidated under the name and style of the Peoria, Decatur & Evansville Railway Company."

The Pekin, Lincoln & Decatur owned a line from Pekin, Ill., to Decatur, 67½ miles, and leased the use of 9 miles from Pekin to Peoria. The Decatur, Mattoon & Southern owned a road from Hervey City to Mattoon, 32 miles, with the right to use the Illinois Midland track from Hervey City to Decatur, 8 miles. The consolidated company therefore owns 99½ miles of road, and will run trains from Peoria to Mattoon 116½ miles. Both roads have been sold under foreclosure and reorganized.

Pittsburgh & Lake Erie.—A contract has been let to Mr. B. J. McGrann, of Lancaster, Pa., for grading a second track over the whole length of this road from Pittsburgh to Youngstown.

St. Louis, Alton & Terre Haute.—The following circular is issued by the General Manager:

"Notice is hereby given that the Belleville & Eldorado Railroad has been completed between Duquoin and Eldorado, 51 miles, and is now open for business. This company has taken possession of the road and arranged to operate the same as part of its line. It is under the control of our existing management, and will hereafter be known as the Eldorado Division of the St. Louis & Cairo Short Line."

This makes the line worked by this company 129 miles long, from East St. Louis across Illinois to Eldorado.

St. Louis, Kansas & Arizona.—The track of this road is now laid to Leroy, Kan., 24 miles southwest from the late terminus at Garnett, and 52 miles from the starting point at

Paola. A branch from Osawatomie west by north to Ottawa, 21 miles, is now all graded and ready for the rails.

St. Paul & Sioux City.—The track of the Black Hills Branch is now laid to Woodstock, Minn., 44 miles westward from the main line at Heron Lake. This is to be the terminus for the winter.

This company has organized the Sioux City & Nebraska Company, which will take possession of its recent acquisitions in Nebraska, the Omaha & Northern Nebraska and the Covington, Columbus & Black Hills roads, and will build the connecting line required to complete the former road to Sioux City.

Salisbury Beach.—This company has been organized to build a railroad from Salisbury Beach, Mass., to Black Rock on the Merrimac River, a distance of 2¼ miles. The capital stock is fixed at \$25,000.

Savannah, Florida & Western.—The following circular is dated Savannah, Ga., Dec. 9:

"Connecting lines are hereby notified that the Savannah, Florida & Western Railway Company has this day succeeded, by purchase, to the Atlantic & Gulf Railroad Company."

"All officers and agents of the Receivers of the Atlantic & Gulf Railroad Company have been continued in office, and all rates and agreements are considered as still in effect."

"All ticket balances on account of the Receivers of the Atlantic & Gulf Railroad Company will be settled by this company."

"All remittances and drafts will be receipted for or accepted by Wm. P. Hardee, Treasurer."

Securities on the New York Stock Exchange.—The following securities have been placed on the lists at the New York Stock Exchange:

New York, Lake Erie & Western.—Extended second-mortgage bonds, due 1910, amount \$2,157,000. Income bonds issued for stock assessments under plan of reorganization, \$507,900, or \$2,599,500 in amount.

Sioux City & Dakota.—This road, formerly the Sioux City & Pembina, is now completed to Sioux Falls, Dakota, 25 miles northward from the late terminus at Beloit, Ia., and 90 miles from Sioux City. Regular trains were to run to Sioux Falls this week.

This company now owns 138 miles of road, the main line from Sioux City to Yankton (the former Dakota Southern), 61 miles, and the line from Davis Junction to Sioux Falls, 77 miles.

Sioux City & Nebraska.—This company has been organized to hold the existing and build the projected lines of the St. Paul & Sioux City Company in Nebraska. The capital stock is fixed at \$6,000,000. The incorporators are Horace Thompson, A. H. Wilder, C. H. Biglow, Henry M. Sibley, John F. Prince, John L. McFarlan, J. W. Bishop, G. W. Hamilton and James H. Drake.

Susquehanna & Clearfield.—This company has been organized to build a railroad from Keating, on the Philadelphia & Erie road, in Clinton County, Pa., southeast to a point on the Bald Eagle Valley road. It will be about 35 miles long, following mainly the West Branch of the Susquehanna.

Texas & Pacific.—The Philadelphia North American says: "For some months negotiations have been in progress for the extension of the Texas & Pacific Railway westward from Fort Worth to El Paso—a distance of 600 miles. There are so many details to be settled that it was a matter of weeks, but at last the contract has been drawn up, and it will be signed as soon as the corporation has been organized to do so. This may seem a strange way of putting it, but the negotiations have been with a party of capitalists, both in this country and Germany, who will undertake the work, and it is probable that it will be done by a company organized under the general laws of Connecticut, which are believed to be more favorable for the prosecution of enterprises beyond the limits of the state than are those of New York or Pennsylvania. On this construction company, so much it will be—it is understood that Messrs. Sydney Dillon, Jay Gould and Russell Sage are members, and possibly Mr. C. P. Huntington. They will take the contract for the building of the road from Fort Worth to El Paso within two years, from the first of next January, for \$20,000 in stock and \$25,000 in first-mortgage 6 per cent. bonds per mile. At the last special meeting of the stockholders, held a week ago, the mortgage was authorized, and of the amount to be issued \$5,000 a mile will remain in the treasury of the company."

"This is the arrangement as far as the company is concerned. There is to be no change in the management; indeed there cannot be for at least a year, as the trustees—Messrs. Frank S. Bond, William F. Walters and Alfred Gaither—hold a majority of the stock for the purposes of voting, and that trust will not be dissolved until October next. The stock is held, so far as ownership goes, by about 300 stockholders, which is an increase of over 50 per cent. within a year, the sales having been very considerable lately. The transactions on the stock exchange represent only a very small proportion of these sales—in fact, it is likely that ten times as much stock has changed hands during the past three months as has been sold on the board. Of course in the end the party holding the largest amount of stock will control the road. That party is not now the Dillon, Gould and Sage clique, who have only a comparatively small interest. To enable them to get a majority of the stock under this contract they would have to build at least 350 miles of road, and two millions of the stock and bonds have been offered to the present stockholders."

"The most important matter settled by the contract is that neither the Texas & Pacific nor the Southern Pacific will apply to Congress for any further assistance, and they will work together, exchanging freight and passengers at El Paso, toward which point the Southern Pacific is now pushing from Fort Yuma. As to the arrangement for the immediate admission of Mr. Gould to the board, no such thing is yet settled upon."

Vicksburg, Shreveport & Texas.—The bondholders, who bought this road at the recent foreclosure sale, have organized the Vicksburg, Shreveport & Pacific Company. It is stated that they will, as soon as possible, make arrangements for the extension of the road from the present terminus at Monroe, La., to Shreveport, about 100 miles. The road is worth little as it is at present, and the extension is the only way of increasing its value.

Wachusett.—A survey has been made for a railroad from Princeton, Mass., to Wachusett Lake and the end of the carriage road up Wachusett Mountain. The distance is 3½ miles.

Warwick Valley.—On the extension of this road from Warwick, N. Y., to McAfee Valley, N. J., the grading is now all finished except in two deep cuts, which are nearly ready. The rails are being delivered, and tracklaying will be begun early in January. The company will have equipment of its own (it has heretofore used that of the Erie) soon upon the road, and is having plans prepared for some refrigerator cars for milk transportation.